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Before the Committee on Appropriations

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Department of the Interior and Related Agencies Appropriations

93d CONGRESS, SECOND SESSION

Fiscal Year 1975

Part 1 (Pages 1–1634)

JUSTIFICATIONS

AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
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DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1975

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE

NINETY-THIRD CONGRESS

SECOND SESSION

AN ACT MAKING APPROPRIATIONS FOR THE DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES FOR THE FISCAL YEAR ENDING JUNE 30, 1975, AND FOR OTHER PURPOSES

Printed for the use of the Committee on Appropriations

PART 1

JUSTIFICATIONS

U.S. GOVERNMENT PRINTING OFFICE

29-393 O WASHINGTON : 1974

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DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

HIGHLIGHT STATEMENT

National Resource Lands managed by the Bureau of Land Management total over 450 million acres, 20% of the land area in the United States. BLM also administers an additional 369 million acres of other Federal and private lands which constitutes the public mineral estate, and 1.146 billion acres of the Outer Continental Shelf (OCS) to the 2,500 meter ocean depth. Because of their vast size and wealth of natural resources, the management of these lands has an increasingly important impact on the social, economic, and environmental affairs of the Nation.

In 1972, public and OCS lands furnished 30 percent of the total mineral production in the United States, and satisfied 17 percent of domestic requirements for oil and gas. Because of the urgent National need to develop additional energy sources, efforts are being intensified to make Bureau-managed energy resources available. Coal and oil shale reserves, geothermal steam areas, and the Outer Continental Shelf will provide a majority of the sources for increased domestic energy production.

Other vital resources such as water, forage, timber, wildlife, recreation opportunities and the land itself contribute to the Nation's economic, social and environmental well-being.

The Bureau's Budget for 1975 is aimed at contributing directly to meeting urgent national priorities and implementing enacted legislation to assure proper use, development and protection of these resources.

FUEL AND ENERGY PROGRAMS

Expanded efforts are proposed which will help to alleviate National energy shortages. Accelerated leasing of fuel resources will require inventory and analysis of potential energy production areas, developing land use plans and environmental analyses, and proper administration of leases to assure surface protection and rehabilitation of developed areas. New production from domestic energy reserves is essential to offset the anticipated twofold increase in energy consumption by 1985, yet this must be accomplished by minimizing the impact on environmental quality. The Bureau's action plans for accomplishing these objectives include:

° Outer Continental Shelf Leasing. The Bureau has expanded lease sales to 3 million acres. Expedient assessment and development of the estimated 377 billion barrels of oil and 1,517 trillion cubic feet of gas under appropriate environmental criteria is essential. A proposed $10,300,000 increase will provide for additional staffing of Pacific, Atlantic and Alaska

environmental assessment teams initated in FY 1974, added capability for designing and supervising contract studies and emphasis on undersea pipeline and coral reef management to facilitate this expanded leasing effort.

° Inventory and Planning. The allocation of National Resource Lands for energy development including production sites and related facilities should be made within the framework of comprehensive land use plans. An increase of $1,050,000 provides for accelerating Management Framework Plans in potential energy areas. These plans relate resource inventory data to socio-economic and environmental considerations, involve public meetings and hearings, and result in decisions as to what uses will be made of the available resource management opportunities. They provide the basis for an orderly course of action to allow for complex energy-related land uses such as coal gasification and other power plants, transmission lines, oil and gas pipelines and roads, which often compete with other possible resource uses and developments. Management Framework Plans will be completed in the coal areas of Montana, North Dakota, Wyoming and Utah; and in a known geothermal resource area in both California and Nevada.

° Environmental Analysis for Energy Actions. Accelerated energy resource production requires intensified environmental analyses and impact statement preparation in advance of energy resource development. A proposed $2,300,000 increase will provide capability to prepare quality environmental analyses for upland oil and gas exploration and development. It will also provide the Bureau the capability to perform environmental work associated with facilities on or across National Resource Lands such as waste disposal areas, right-of-way, special use sites, pipelines and transmission lines, related to the development or privately owned coal, oil and gas and other fuel sources. This program, coupled with BLM's land use planning program (MFP's) provides an effective means to systematically study development proposals, analyse their impact and prescribe mitigation measures to minimize potential environmental damage.

° Upland Energy Minerals Leasing. An orderly lease program to convert major resources for coal and oil shale into significant energy producers, and to develop geothermal steam as a clean supplemental energy source is of prime importance for long-term self-sufficiency. The proposed increase will implement a managed coal leasing program on which preliminary work was begun in FY 1974. A five-year lease schedule for the States of North Dakota, Montana, Wyoming, Utah, Colorado, and New Mexico will relate regional Federal coal and the Federal sector's portion of satisfying coal-derived energy demand. Geothermal steam and oil shale leasing efforts, which received a mid-year supplemental appropriation of $450,000 in FY 1974 will be continued throughout FY 1975. Extending those efforts includes administering the first six oil shale prototype lease sales, and processing applications under the grandfather right provision for geothermal leases. The Budget increase of $280,000 will annualize the costs of these two programs in FY 1975.

° Surface Rehabilitation and Protection. Proposals to avoid and minimize the effect of large scale mining on the environment are included in this budget. With the country facing an immediate energy shortage and fuel mineral extraction increasing, protection of areas subject to mineral operation is essential to preventing irreparable surface damage. This program increase will provide for conducting tests to determine reclamation potential or limitations in lease areas, and supply the required capability to incorporate protective stipulations in mineral leases and permits, and monitor their compliance.

° Alaska Pipeline Inspection. An increase of $1,500,000 is requested for full-year costs of a 3rd party contractor who will assist the Authorized Officer in technical review and surveillance of pipeline construction activities across the interior of Alaska. The proposed increase annualizes funds appropriated for the technical surveillance contract in the last half of FY 1974. Workloads on the pipeline project will expand tremendously in the early part of the four-year construction period with a gradual deceleration in the last two years. Project workloads include preliminary and final design review, checking compliance with stipulations, assuring engineering quality control, performing spot check inspections of construction, reviewing permittees' quality assurance programs, reviewing and overseeing procedures and operations for starting oil flow, and reviewing contingency planning.

RECREATION MANAGEMENT PROGRAMS

The Bureau is experiencing widespread recreation use at an increased rate and in a variety of pursuits. Demand for recreation opportunities in the United States is likely to triple by the year 2000. Both the magnitude of this demand and the variety of recreation activities contribute to BLM's recreation management problems. Only 18 full-time field visitor management personnel are available on 172 million acres of National Resource Lands in the conterminous western states. Sixty-six million acres of this land are within a three-hour drive, and 6 million acres are within a forty-mile radius of cities having a combined population of 35 million people. This and the fact that four million off-road vehicles are using the National Resource Lands each year continues to jeopardize archeologic and historic features, and other recreation values.

Our proposed recreation increase of $2,050,000 consists of four components to develop systems of visitor management, and protect unique natural and cultural resources as directed by legislation, Executive Order, and other authority.

° For Off-Road Vehicles, an increase of $260,000 will be used to augment the implementation of Executive Order 11644, which calls for managing the use of off-road vehicles on all Federal lands. It is estimated that 20 million visitor days are generated by the use of approximately 4 million Off-Road Vehicles (ORV's). This use has the potential to literally destroy surface resources, and indiscriminate ORV use has already obliterated unique cultural values

along the Lower Colorado River in Arizona and California. The increase will be used to solicit the public's assistance in designating ORV trails and areas, and to mark ORV use boundaries and describe conditions of use on maps and brochures. This will result in closing 35 critical areas susceptible to heavy damage from ORV's, designating 35 open areas, patrolling closed and restricted areas, and issuing and monitoring permits for up to 150 organized events.

° Protection of the Cultural Environment. An increase of $300,000 is proposed. The increase will complete a cultural inventory on 5% of the National Resource Lands in FY 1975, identify important cultural features that are in danger of being lost or damaged, provide archeological expertise in critical areas and develop contract services with universities, museums, and historical societies to assist in managing the cultural resources.

° Wild and Scenic Rivers, National Trails and Bicentennial Trails. A proposed increase of $640,000 will be used to preserve, protect, and manage selected rivers and trails in National systems as directed in Public Laws 90-542 (Wild and Scenic Rivers Act) and 90-543 (National Trails Systems Act) and to fund BLM's participation in the Nation's Bicentennial celebration. Timely, informed decisions on both existing and potential Wild and Scenic Rivers are crucial to protect management options and prevent irreversible actions from altering the character of rivers. The increase will also fund development and implementation of a management plan for the Pacific Crest Trail, and evaluation of the Oregon Trail for possible inclusion in the National Trail System. The Bicentennial proposal provides for the identification, protection, and publicizing of the Pony Express, Oregon, and Escalante Trails by 1976.

FORESTRY PROGRAM

An increase of $1,425,000 in forestry programs on National Resource Lands outside of western Oregon will provide for marketing an additional 100 million board feet of timber, and long-term improvements of forest management on National Resource Lands outside western Oregon. These increase funds are made available by a corresponding decrease in O&C work normally funded in this activity. The resulting decrease an investment in O&C forest management will be offset by an increase in the forest development, protection, and management activity of the O&C Grant Lands appropriation which is made possible by increased Western Oregon timber receipts. The increase is part of a plan to reduce the Nation's dependence on wood-product imports at a time when demand for timber is increasing. Housing construction, the single largest consumer of wood products, is expected to maintain the 1973 average of 1.6 million starts.

National Resource Lands excluding Western Oregon and Alaska contain approximately 2 million acres of commercial forest lands and some 23 million acres of wood lands. Management has largely been custodial with limited timber sales. There is a capacity for increased production, but only through intensive management.

Specific accomplishments from this increase include: acceleration of a seven-state reinventory begun in FY 1972 to provide a basis for a new annual timber sale offering and to develop an intensive forest management plan by 1976; marketing an additional 100 million board feet of timber in FY 1975 worth about $ 5 million in added receipts; and increasing reforestation and stand improvement to improve future timber production.

WILD HORSE AND BURRO PROGRAM

Implementation of the Wild Horse and Burro Act (Public Law 92-195) began in FY 1974. The proposed increase for FY 1975 augments the initial funding so that 1,600 private claims now on file for 17,000 animals can be settled. Processing these claims involves public meetings, advertising, joint cooperation with state agencies and supervising the gathering and removal of claimed animals. Humane gathering of the animals whether on private lands or on Federal land involves detailed planning, expenses to construct facilities, and considerable manpower. The Act calls for protection, control, and management of the animals, and early implementation of herd management plans is critical to maintain a healthy population that the habitat can safely support. A public information and education program will also be developed because it is important that the public understands and participates in developing a plan that balances wild horses and burros with other multiple uses.

ALASKA NATIVE CLAIMS PROGRAM

This proposed increase consists of $1,735,000 for land and realty service activities, and $3,265,000 for cadastral survey to implement the Alaska Native Claims Act. The Act set short time frames for determining final disposition of some 165 million acres in Alaska. It calls for fair and just settlement of claims by Natives and Native groups resulting in a grant of 40 million acres, 80 million acres for national purposes - parks, wildlife refuge and forests - and 45 million acres for final classification for public purposes. An additional 104 million acres granted to the State under the Alaska Statehood Act adds to the workload of processing encumbrances on land within selection areas, adjudicating special use applications, investigating claims, and maintaining land status records. Of the total state selections, 16 million acres have been patented or tentatively approved.

Surveys to legally describe and locate the land will be required on a massive scale so that patents may be issued to legitimate land claimants.

This additional emphasis for finalizing disposition of public lands in Alaska is critical to the timely implementation of fair and equitable land settlements on behalf of all Alaskans.

GSA SPACE COSTS

Public Law 92-313, Public Buildings Amendments of 1972, requires that effective July 1, 1974, agencies be charged for space and related services provided by the General Services Administration (GSA) at

approximate commercial equivalent rates. The estimated requirement for space and related services in GSA facilities based on rates supplied by GSA is $6,500,000.

Construction & Maintenance

Funding levels have not been adequate to keep pace with increased costs of maintenance requirements. Rising costs of wages, materials, and services have seriously affected BLM's ability to maintain buildings, developed recreation sites, and roads and trails on a level that assures safe conditions for employees and the public and protects the investment in these facilities.

The proposed increase of $1,387,000 provides for taking corrective measures to repair or replace damaged and deteriorating facilities including developed recreation sites where use is accelerating; eliminate hazards such as open mine shafts and debris in areas of intensive use; and avoid long-run costs of rebuilding roads and trails by performing preventive maintenance.

The budget also includes $1,703,000 for construction of high priority buildings and recreation facilities.

Summary of Appropriations

	FY 1974	FY 1975	Increase (+) Decrease (-)
	(in thousands of dollars)		
Management of Lands and Resources			
1. Resource Management, Conservation, and Protection	$ 78,511	$106,903	$+28,392
2. Cadastral Survey	8,624	12,580	+ 3,956
3. Firefighting and Rehabilitation	6,400	5,400	- 1,000
4. General Administration	3,423	4,151	+ 728
Total, Management of Lands and Resources	96,958 1/	129,034	+32,076
Construction and Maintenance			
1. Construction	3,235	1,703	- 1,532
2. Maintenance	3,565	4,952	+ 1,387
Total, Construction & Maintenance	6,800	6,655	- 145

1/ Includes proposed supplemental of $5,000,000 for civilian pay raises.

	FY 1974	FY 1975	Increase (+) Decrease (-)
	(in thousands of dollars)		
Public Lands Development Roads and Trails (Liquidation of Contract Authority)	4,000	4,070	+ 70
Oregon and California Grant Lands (Indefinite)	28,750	28,750	---
Range Improvements (Indefinite)	3,242	4,503	+ 1,261
Recreation Development and Operation of Recreation Facilities	165	242	+ 77
Subtotal.....	139,915	173,254	+33,339
Permanent Appropriations.....	105,065	120,105	+15,040
Grand Total.....	244,980	293,359	+48,379

Summary of Receipts

As shown in the table below the Bureau continues to produce substantial revenues for the U.S. Treasury and for public land states and counties.

Receipts Collected by the Bureau ($ in millions)

	1972	1973	1974 a/	1975 a/
Total Receipts.....	$ 524	$4,229	$6,328	$5,329
For payment to States and Counties.....	- 90	- 96	- 104	- 119
Deposited in Treasury.....	$ 434	$4,133	$6,224	$5,210

a/ Estimated

Summary Energy Research and Development Analysis 1/
Management of Lands and Resources

(in thousands of dollars)

Activity Project or Program	FY 1974 Amount Available	FY 1975 Regular Budget	FY 1975 Budget Amendment H.D. 2/	FY 1975 Total Request	Increase (+) or decrease (-) 1975 compared with 1974
Resource Management Conservation and Protection OCS Research	$1,100	$1,100	$9,700	$10,800	+ $9,700
Subtotal, Energy R&D	1,100	1,100	9,700	10,800	+ 9,700
All other activities	95,858	118,234	---	118,234	+ 22,376
Total, Management of Lands & Resources	$96,958	$119,334	$9,700	$129,034	+$32,076

1/ This table shows the relation of the FY 1975 budget amendment for the accelerated energy R&D program to the FY 1975 regular budget request and the FY 1974 amount available.

2/ House Document number to be determined.

RECEIPT BY SOURCE

The following table shows actual receipts of the Bureau of Land Management for fiscal years 1971, 1972 and 1973 and estimated receipts for 1974 & 1975.

	Actual 1971	Actual 1972	Actual 1973	Estimate 1974	Estimate 1975
Sales, Public Lands and Materials....	$ 2,013,823	$ 1,941,520	$ 1,797,933	$ 2,200,000	$ 2,200,000
Fees & Commissions.	4,096,965	5,351,278	6,791,187	8,000,000	9,000,000
Mineral Leasing....	151,332,134	145,098,401	149,300,989	160,206,000	167,400,000
Mineral Leasing, Outer Continental Shelf.....	1,050,549,370	279,352,756	3,955,577,016	6,000,000,000*	5,000,000,000*
Grazing Fees.....	7,549,969	8,021,646	9,281,527	12,248,000	14,046,000
Right-of-Way Leases.	270,963	293,908	427,981	425,000	425,000
Timber Sale..... ...	70,663,296	83,519,703	104,642,478	125,800,000	126,200,000
Trans-Alaska Pipeline.....	---	---	---	18,200,000	9,550,000
Miscellaneous Receipts	482,104	341,584	463,674	475,000	475,000
Total	$1,286,958,624	$523,920,796	$4,228,282,785	6,327,554,000	5,329,296,000

* Despite a critical need for additional resources, the receipt level for FY 1974 and FY 1975 will depend upon the anticipated impact of each proposed sale upon the environment as well as the continuing safe operation of existing OCS facilities. NOTE: This table does not include P.L. 86-649 funds.

PAYMENTS OF BUREAU OF LAND MANAGEMENT RECEIPTS TO STATES, FY 1973

State	Sales of Public Lands and Timber	Mineral Leases and Permits	Taylor Grazing Districts	Taylor Grazing Leases	Other	Total
Alabama	---	9,995	---	---	---	9,995
Alaska	3,213	5,944,455	---	---	---	5,947,668
Arizona	6,686	176,191	32,927	47,218	---	263,022
Arkansas	2	16,165	---	---	---	16,167
California	60,048	3,083,815	6,838	56,621	---	3,207,322
Colorado	6,526	4,040,535	33,112	21,504	---	4,101,677
Florida	74	2,489	---	---	---	2,563
Idaho	34,256	399,164	62,476	15,532	---	511,428
Kansas	---	175,761	---	11	---	175,772
Louisiana	3	260,189	---	---	---	260,192
Michigan	---	16,650	---	---	---	16,650
Mississippi	1	9,483	---	---	---	9,484
Montana	11,910	2,645,046	39,534	58,080	193,905 a/	2,948,475
Nebraska	---	3,577	---	438	---	4,015
Nevada	29,077	361,498	113,746	11,894	---	516,215
New Mexico	7,668	13,934,508	69,418	90,422	7,190 a/	14,109,206
North Dakota	45	216,460	---	3,193	---	219,698
Oklahoma	---	260,496	---	97	---	260,593
Oregon	150,289	66,752	48,467	26,911	38,186,536 b/	38,478,955
South Dakota	1,116	78,421	---	27,141	---	106,678
Utah	3,426	4,056,326	59,969	---	2,975 a/	4,122,696
Washington	1,993	196	---	10,881	---	13,070
Wyoming	3,313	20,469,102	70,656	147,493	---	20,690,564
All Others	87	---	---	---	---	87
Total	319,733	56,227,274	537,143	517,436	38,390,606	95,992,192

a/ Executive Orders 10787, November 6, 1958, and 10890, Oct. 27, 1960, from grazing and mineral receipts, L.U. Lands.
b/ From "O&C" Lands, $37,666,826; Coos Bay Wagon Road Lands, $519,710

BUREAU OF LAND MANAGEMENT

Management of Lands and Resources

Appropriation, 1973	$78,065,000	
Supplemental appropriation, 1973	18,500,000	
Total Appropriation, 1973		$96,565,000
Transferred to "Operating Expenses, Public Building Service", General Services Administration		284,379
Total Available, 1973		$96,280,621
Appropriation, 1974	$83,932,000	
Supplemental appropriation, 1974	8,450,000	
Proposed supplemental appropriation (civilian pay raise), 1974	5,000,000	
Total Appropriation, 1974		$97,382,000
Transferred to "Operating Expenses, Public Buildings Service", General Services Administration		- 424,000
Total Available, 1974		$96,958,000

Summary of Increases and Decreases, 1975

	Base for 1975	Increase/Decrease 1975
Resource Management Conservation and Protection		
Fuel and Energy Programs (+$18,530,000)		
To continue an accelerated Outer Continental Shelf leasing and management program with adequate environmental safeguards	$3,460,000	+$10,300,000

To accelerate land use planning with emphasis in energy areas.....	$1,317,000	+$1,050,000
To accelerate preparation of environmental analyses and statements in priority energy resource areas prior to development.....	2,005,000	+ 2,300,000
To expand available supplies of energy by developing a Government-motion coal leasing program and to annualize costs for increased effort in oil shale and geothermal steam lease administration.....	2,085,000	+ 1,330,000
To avoid or minimize environmental degradation caused by mineral leasing and exploration.....	1,050,000	+ 2,050,000
To provide full year costs of Alaska pipeline inspection.....	7,214,000	+ 1,500,000
Recreation Management Programs (+$2,050,000)		
To accelerate a program of directing and controlling ORV use pursuant to Executive Order 11644.....	350,000	+ 260,000
To identify, and protect cultural values as identified by Executive Order 11593.....	100,000	+ 300,000
To preserve, protect and manage wild and scenic rivers and trails.....	80,000	+ 640,000
To provide for increased management of the California Desert.....	1,232,000	+ 850,000

Other Increase Programs		
To market an additional 100 million board feet of timber on National Resource Lands outside Western Oregon.....	$2,286,000	[+$1,425,000]
To accelerate the implementation of public Law 92-195 for the protection, control and management of wild horses and burros.....	400,000	+ 300,000
To continue implementation of the Alaska Native Claims Settlement Act (Land & Minerals portion)	3,533,000	+1,735,000
To meet increased costs for employee compensation payments.....	320,000	+ 13,000
To provide for space and related services in GSA facilities - P.L. 92-313.....	---	+4,710,000
To annualize the October, 1973, pay raise for civilian employees.....	---	+1,054,000
		+7,812,000
Cadastral Survey		
To expand Alaska cadastral survey capability to meet the requirements of the Alaska Native Claims Settlement Act.....	1,225,000	+$3,265,000
To provide for space and related services in GSA facilities - P.L. 92-313.....	---	+ 571,000
To annualize the October, 1973, pay raise for civilian employees.....	---	+ 120,000
		+$3,956,000
Firefighting and Rehabilitation		
Decrease equal to FY 1974 fire rehabilitation supplemental.....	---	-$1,000,000
		-$1,000,000

General Administration

To provide for increased administrative workload.....	$3,285,000	+$ 200,000	
To provide for space and related services to GSA facilities - P.L. 92-313.....	---	+ 452,000	
To annualize the October, 1973, pay raise for civilian employees.....	---	+ 76,000	
			+$ 728,000
Net Increase, FY 1975.....			+$ 32,076,000
Budget Estimates, FY 1975.....			$129,034,000

Analysis by Activities

Activity	FY 1973 Amount Available	FY 1974 Appropriations	FY 1974 Pay Cost Supplemental	FY 1974 Transfersa/	FY 1974 Adjusted Amount Available
1. Resource management, conservation and protection.....	$61,400,257	$74,722,000	$4,110,000	-321,000	$78,511,000
2. Cadastral survey.....	7,881,280	8,201,000	526,000	-103,000	8,624,000
3. Firefighting and rehabilitation.....	23,842,123	6,400,000	-----	-----	6,400,000
4. General administration.....	2,984,000	3,059,000	364,000	-----	3,423,000
Unobligated balance lapsing.	190,471	------	-----	-----	------
Total.....	$96,298,131	$92,382,000	$5,000,000	-424,000	$96,958,000

a/ Transfer to Public Buildings Service, General Services Administration.

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Analysis by Activities

	FY 1973 Amount Available	FY 1974 Adjusted Amount Available	FY 1975 Estimate	Increase(+) Decrease(-) 1975 Compared with 1974
1. Resource management conservation, and protection.....	$61,400,257	$78,511,000	$106,903,000	+$28,392,000
2. Cadastral Survey....	7,881,280	8,624,000	12,580,000	+ 3,956,000
3. Firefighting and rehabilitation.....	23,842,123	6,400,000	5,400,000	- 1,000,000
4. General administration.....	2,984,000	3,423,000	4,151,000	+ 728,000
Unobligated balance lapsing.....	190,471	-----	-----	-----
Total.....	$96,298,131	$96,958,000	$129,034,000	+$32,076,000

1. RESOURCE MANAGEMENT, CONSERVATION & PROTECTION

Analysis by Subactivities

Subactivity	FY 1973 Amount Available	FY 1974 Amount Available	FY 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974 Total Program
Land & Minerals Management.....	$19,118,630	$26,409,000	$45,731,000	+$19,322,000
Alaska Pipeline Inspection.....	897,853	7,214,000	8,868,000	+ 1,654,000
Range Management..	7,108,736	7,973,000	9,133,000	+ 1,160,000
Forestry.....	7,721,316	8,256,000	8,998,000	+ 742,000
Soil & Watershed Conservation.....	13,387,129	14,341,000	16,565,000	+ 2,224,000
Fire Protection...	7,433,095	7,712,000	8,095,000	+ 383,000
Recreation & Wildlife.....	5,733,498	6,606,000	9,513,000	+ 2,907,000
Total.....	$61,400,257	$78,511,000	$106,903,000	+$28,392,000

1. RESOURCE MANAGEMENT, CONSERVATION AND PROTECTION
Analysis of Change in Subactivities
by Program Feature
FY 1975 Compared with FY 1974

	PROGRAM FEATURES (in thousands)													
			FUEL AND ENERGY PROGRAMS											
	(1a)	(1b)	(1c)	(1d)	(1e)	(1f)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
	OCS Leasing	Inventory and Planning for Energy Areas	Environmental Analysis for Energy	Upland Mineral Leasing	Surface Protection	Trans-Alaska Pipeline	Rec. Mgmt. Programs	Forest Mgmt. Outside Western Oregon	Wild Horses	Alaska Native Claims	BEC Payment	GSA Space Costs	Pay Cost Annualization	Net Increase
Land and Mineral Mgt.....	+$10,300	+$ 470	$+1,920	$+1,330	$+ 975	---	$+ 125	---	---	$+1,735	---	$+2,015	$+ 452	+$19,322
Alaska Pipeline Insp.....	---	---	---	---	---	+$1,500	---	---	---	---	---	+ 126	+ 28	+1,654
Range Mgt.....	---	+ 75	+ 71	---	---	---	+ 25	---	+$ 300	---	---	+ 563	+ 126	+1,160
Forestry.....	---	+ 30	+ 63	---	---	---	---	+($1,425) 1/	---	---	---	+ 531	+ 118	+ 742
Soil and Watershed Conserv.....	---	+ 195	+ 85	---	+1,075	---	+ 25	---	---	---	+$ 13	+ 679	+ 152	+2,224
Fire Protection.....	---	---	---	---	---	---	---	---	---	---	---	+ 313	+ 70	+ 383
Recreation and Wildlife.....	---	+ 280	+ 161	---	---	---	+1,875	---	---	---	---	+ 483	+ 108	+2,907
Total.....	+$10,300	$1,050	$+2,300	$+1,330	$+2,050	$+1,500	$+2,050	$+1,425	$+ 300	$+1,735	$+ 13	$+4,710	$+1,054	+$28,392

1/ Offset by decrease in Western Oregon Forest Management program financed by this activity.

1. Resource Management, Conservation and Protection: FY 1974, $78,511,000; FY 1975, $106,903,000; an increase of $28,392,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
1. Energy Programs				
(1a) +$10,300,000	+43	$13,760,000	145	To continue an accelerated Outer Continental Shelf Leasing and Management program with adequate environmental safeguards.
(1b) + 1,050,000	+28	6,590,000	221	To accelerate land use planning with emphasis in energy areas.
(1c) + 2,300,000	+86	4,305,000	157	To accelerate preparation of environmental analyses and statements in priority energy resource areas prior to development.
(1d) + 1,330,000	+35	3,415,000	159	To expand available supplies of energy by developing a Government-motion coal leasing program and to annualize costs for increased effort in oil shale and geothermal steam leasing.
(1e) + 2,050,000	+31	3,100,000	79	To avoid or minimize environmental degradation caused by mineral leasing and exploration.
(1f) + 1,500,000	-	8,714,000	44	To provide full year costs of Alaska pipeline inspection.
2. Recreation Programs				
(2a) + 260,000	+ 7	610,000	21	To accelerate a program of directing and controlling ORV use pursuant to Executive Order 11644.

(2b)	+ 300,000	+ 4	400,000	9	To identify, and protect cultural values as identified by legislation and Executive Order 11593.
(2c)	+ 640,000	+ 8	720,000	12	To preserve, protect and manage wild and scenic rivers and trails.
(2d)	+ 850,000	+28	2,082,000	46	To provide for increased management of the California Desert.
(3)	[1,425,000] 1/	[43]	3,711,000	150	To market an additional 100 million board feet of timber on National Resource Lands outside Western Oregon.
(4)	+ 300,000	+ 6	700,000	16	To accelerate the implementation of public Law 92-195 for the protection, control and management of wild horses and burros.
(5)	+1,735,000	+45	5,268,000	152	To continue implementation of the Alaska Native Claims Settlement Act.
(6)	+ 13,000	-	333,000	-	To meet increased costs for employee compensation payments.
(7)	+4,710,000	-	4,710,000	-	To provide for space and related services in GSA facilities - P.L. 92-313.
(8)	+1,054,000	-	1,054,000	-	To annualize the October 1973 pay raise for civilian employees.
Total	+$28,392,000	+321			

1/ Offset by decrease in Western Oregon forest management program financed by this activity.

Cost Factors Involved in Increases

(1a) Forty-three permanent man-years at an average annual cost of $16,000, $688,000; travel and per diem for field studies and examinations at an average annual cost of $2,000, $86,000; rent, communication, supplies, materials and equipment, $20,000; contractual cost for studies and analysis, $9,506,000 (OCS).

(1b) Twenty-eight permanent man-years at an average annual cost of $16,000, $448,000; five temporary man-years at an average annual cost of $10,000, $50,000; travel and per diem for field studies, inventories and analysis at an average annual cost of $3,000, $99,000; rent, communications, printing, supplies, materials and equipment, $100,000; contractual costs for studies, inventories and analysis, $353,000 (Land Use Planning).

(1c) Eighty-six permanent man-years at an average annual cost of $16,000, $1,376,000; travel and per diem for field studies and analysis at an average annual cost of $3,000, $252,000; rent, communication, printing supplies, materials and equipment, $250,000; contractual costs, costs for studies and analysis, $422,000 (Environmental Analysis).

(1d) Thirty-five permanent man-years at an average annual cost of $16,000, $560,000; five temporary man-years at an average annual salary of $10,000, $50,000; travel and transportation of persons at an average annual cost of $3,000, $120,000; contractual services for studies and analysis $500,000; rent, communications, printing, supplies and materials, $100,000 (Coal, Oil Shale, Geothermal).

(1e) Thirty-one permanent man-years at an average annual cost of $16,000, $496,000; five temporary man-years at an average annual cost of $10,000, $50,000; travel and transportation of persons for field studies and analysis at an average annual cost of $4,000; $140,000; contractual services for studies and analysis, $1,274,000; rent, communications, printing, supplies and materials, $90,000 (Surface Protection).

(1f) Contractual services for inspection of pipeline, $1,500,000.

(2a) Seven permanent man-years for management of ORV use at an average annual cost of $16,000, $112,000; travel, transportation of persons and per diem at an average annual cost of $5,000, $35,000; rent, communications, printing, supplies, materials and equipment, $113,000.

(2b) Four permanent man-years for the protection and enhancement of cultural values at an average cost of $16,000; $64,000; travel and per diem for field studies at an average cost of $3,000, $12,000; equipment, communications, rent, printing, supplies and materials, $50,000; contractual services for studies and protection of cultural resources $174,000.

(2c) Eight permanent man-years to manage rivers and trails at an average annual cost of $16,000, $128,000; travel and per diem at an average annual cost of $4,000, $32,000; equipment, rent, communications, supplies and materials, $35,000; contractual studies $45,000.

(2d) Twenty-eight permanent man-years to provide increased management on the California Desert at an average annual cost of $16,000, $448,000; fifteen temporary man-years at an average annual cost of $10,000, $150,000; travel, transportation of persons and per diem at an average annual cost of $4,000, $172,000; rent, communication, equipment, supplies and materials, $80,000.

3. Forty-three permanent man-years to provide additional forest management of National Resource Lands outside western Oregon at an average annual cost of $16,000, $688,000; thirty temporary man-years at an average annual cost of $10,000, $300,000; travel, transportation of persons and per diem at an average annual cost of $2,000, $146,000; rent, communications and printing, $100,000; supplies, materials and equipment $191,000.

(4) Six permanent man-years for surveillance and protection of wild horse and burros at an average annual cost of $16,000; $96,000; ten temporary man-years at an average cost of $10,000, $100,000; travel, transportation of persons and per diem at an average cost of $3,000, $48,000; rent, communications, supplies, materials and equipment, $36,000; contractual costs for analysis and studies of horses and burros, $20,000.

(5) Forty-five permanent man-years at an average annual cost of $20,000, $900,000; thirty temporary man-years at an average cost of $12,000, $360,000; travel and per diem for field studies at an average cost of $4,000, $300,000; rent, communications, supplies, materials and equipment, $175,000.(ANCSA)

(6) $13,000 for increased cost of employee compensation payments.

(7) For space and related services in GSA facilities, $4,710,000.

(8) To annualize the October, 1973 pay raise for civilian employees, $1,054,000.

Need for Increase:

(1) Fuel and Energy Programs: Achieving domestic sufficiency in energy production by 1980 has become an urgent National goal. World-wide energy shortages are having major impacts on the American people, both in changing their accustomed style of living and in economic consequences. Energy consumption in the United States doubled in the last 20 years, and ways must be found to approximately double energy supplies again in the next 11 years to sustain the American economy and way of life.

This country is entering a period characterized by a widening gap between its demand for energy and its capacity to supply energy from domestic sources. This problem is becoming aggravated as the domestic use of natural gas continues to exceed additions to proven reserves and the demand for crude oil further accelerates beyond the ability of presently developed domestic capacity to meet it.

These conditions will result in a growing dependency for energy from foreign sources with consequential security, economic and foreign trade implications, unless production of domestic supplies is accelerated. Further magnifying the implications of importing fuels are recent substantial increases in the price of foreign crude oil.

Public lands are a major source of energy fuels whose development in an environmentally sound manner can substantially increase domestic energy supplies. Oil Shale reserves in Colorado, Utah, and Wyoming are one of the largest known energy resources remaining in the world, and a majority of the Oil Shale reserves and the known potentially developable Geothermal Steam resources are found on the National Resource Lands. National Resource Lands contain more than three-fourths of the United States' low sulfur coal deposits -- the Nation's largest energy reserve. Under present technological and economic conditions, oil and gas reserves included in the Outer Continental Shelf, have the greatest short-term potential to alleviate oil and gas shortages. OCS reserves are estimated at 377 billion barrels of oil and 1,517 trillion cubic feet of gas. It is estimated that the North Slope of Alaska, to be tapped by the Trans Alaska Pipeline, contains 9.6 billion barrels of recoverable oil.

The Bureau has developed and initiated action plans for accelerated energy programs. Essential elements in implementing these initiatives include accomplishing an accelerated inventory and analysis of proven and potential energy resources where the Federal contribution will be significant, and developing subsequent land use plans and environmental analyses on priority areas. Accelerated leasing programs also require development of protective stipulations that assure surface protection and rehabilitation of lease areas.

Additional funds and positions are required in FY 1975 to carry out these energy initiatives. Specific programs and amounts are shown below and discussed in detail on the following pages:

Fuel and Energy Programs

Program	Requested Increase Amount	Requested Increase Positions	Total Program Amount	Total Program Positions
Outer Continental Shelf Leasing.....	$10,300,000	43	$13,760,000	145
Land Use Planning in Energy Areas...	1,050,000	28	6,590,000	221
Environmental Analysis on Energy Actions..	2,300,000	86	4,305,000	157
Coal, Oil Shale, and Geothermal Steam Leasing Programs..	1,330,000	35	3,415,000	159
Surface Rehabilitation and Protection....	2,050,000	31	3,100,000	79
Trans-Alaska Pipeline Monitoring	1,500,000	-	8,714,000	44
Total Increases	$18,530,000	223		

(1a) Outer Continental Shelf Leasing +$10,300,000 + 43 Positions

Commercial interest in the Outer Continental Shelf, as evidenced by recent leasing activity, is justified on the basis of estimated crude oil and gas reserves. The United States Geological Survey recently estimated potential recoverable crude oil and gas resources in the OCS under current technology and economics to be:

		Oil	Gas
Gulf of Mexico	-	134 billion barrels;	577 trillion cubic feet
Pacific OCS	-	54 billion barrels;	52 trillion cubic feet
Atlantic OCS	-	93 billion barrels;	408 trillion cubic feet
Alaska OCS	-	96 billion barrels;	480 trillion cubic feet
Total		377 billion barrels;	1,517 trillion cubic feet

These totals represent 62% of the U.S. potential oil resources and 65% of the potential gas resources. Noting that the speed at which we can increase our domestic energy production will depend in large measure on how rapidly these OCS resources can be developed, the President in his April 18, 1973, Energy Message directed the Secretary of the Interior to take steps to increase OCS acreage leased to 3 million acres beginning with expanded sales in 1974. By 1985, this accelerated leasing rate

could increase annual energy production by an estimated 1.5 billion barrels of oil (approximately 16 percent of our projected oil requirements in that year), and 5 trillion cubic feet of natural gas (approximately 20 percent of expected demand for natural gas that year.

Approximately two-thirds of the potential oil and gas OCS resources exist in currently undeveloped OCS areas - the Pacific, Atlantic and Alaska. Expedient assessment and development of these large reserves, under appropriate environmental criteria, is essential.

The program increase involves: obtaining information through research on the impact of oil and gas production on the marine environment; providing for additional staffing of Pacific, Atlantic, and Alaska environmental assessment teams initiated in FY 1974, and adding capability for designing and supervising contract studies and for undersea pipeline and coral reef management.

° Research on the Marine Environment $9,700,000 20 Positions

Elimination of basic uncertainties about the impact of OCS operations on the marine environment is a crucial objective of this portion of the proposed increase. Although some research is available on the effect of oil and gas development in part of the Gulf of Mexico, this proposal provides for data collection and studies in scheduled and potential frontier leasing areas. The five areas to be studied represent distinct environmental characteristics different from offshore areas previously under lease. Thus, information on the impact of oil and gas activity in these virgin areas is non-existent; and it is not practical to substitute or project data from other areas to dissimilar regions. The areas proposed for funding in this request include: Mississippi, Alabama, Florida, (MAFLA area) Southern California, South Texas, Atlantic and the Gulf of Alaska.

Specific features of the proposed increase are: (1) gathering key biological, chemical, geological and physical environmental data for the five areas; (2) monitoring these factors during drilling and production activities; and (3) determining and assessing changes in key indicators of marine flora, fauna, and physical characteristics. This research program will be accomplished almost entirely by contract through establishing sampling stations spaced in each of the five areas. Control stations will also be placed outside the leasing areas to differentiate which changes in key indicators are the result of oil and gas operations. The monitoring aspect of the research will cover all aspects of oil and gas activity. For example, drilling activities are the source of chemical and other foreign properties introduced to the marine environment as are platforms and workboats. Platform placement and undersea pipeline operations represent environmental disturbance, the extent and nature of which is not fully known. Data obtained in these studies will be extrapolated to future lease areas within the same general regions with similar characteristics; therefore, it is not expected that each and every lease will require impact evaluation efforts of this nature.

Through coordination with existing Federal research committees and state entities, information will be obtained which predicts the environmental impact of oil and gas leasing and contributes to the design of long-term leasing plans and objectives.

° Environmental Assessment Teams ($365,000) (15 Positions)

Our experience in the Gulf of Mexico indicates that environmental assessment teams should be approximately twelve to thirteen members in size to adequately gather and assess data relating to the environmental impact of potential mineral development in heavily populated, politically sensitive areas. Sales in the Pacific and Alaska (Lower Cook Inlet) are tentatively scheduled for FY 1977. In order to achieve the stated Bureau goal of extensive pre-lease knowledge of environmental conditions, it is imperative that the teams be fully staffed as soon as possible.

The Pacific and Alaska OCS offices, in addition to their environmental assessment capability are expected to have full leasing capability to respond to the scheduled lease sales. Complete staffing for the Atlantic team is also essential to accomplish environmental base line studies in potential lease areas. Further, there is an increasing interest in development of hard minerals on the Atlantic OCS which must also be evaluated for environmental impact. If it is determined that leasing operations can proceed in the Atlantic, in an environmentally satisfactory manner, environmental studies for specific lease areas may be required as early as FY 1975.

° Pipeline and Coral Reef Management ($195,000) (6 Positions)

The program increase is necessary both for the accelerated OCS lease schedule and for improved pipeline management efforts to satisfy current environmental and land use planning requirements. The Bureau is currently developing a program with USGS for improved management of OCS pipelines.

Expanded lease schedules involve additional effort by BLM in the areas of pipeline routing and system development, environment, economics and record keeping. Evaluation of the impact of initial sitings and their cumulative impact is now an integral part of Environmental Impact Statements for a proposed lease sale. Existing pipeline networks along with future proposals are being analyzed to establish future pipeline corridors. Also critical is the multiple use planning effort required to plan pipeline systems and to process right-of-way applications. There are currently 341 permits comprising approximately 3,000 miles on the OCS with 4 applications pending. Right-of-way applications are expected to increase from the five year average of 40 to 70 in FY 1975 and beyond.

Consideration of coral reef environments is critical to maintaining and preserving the quality of marine environment impacted by OCS development. BLM has the responsibility to conduct periodic evaluation studies on the impact of oil and gas development on nearby lease areas.

Activities include studies required under the terms of lease stipulations and base line data inventories and studies and analysis related to possible oil and gas development. Impacts on these unique natural communities must be fully considered in Environmental Impact Statements for proposed lease sales. In many cases, original research is required, particularly in new lease areas. The proposed increase provides for protection and management of the biotic communities in the area of coral reefs through development and supervision of lease stipulations and by general study and research.

° Contract Design and Supervision ($40,000) (2 Positions)

As part of the on-going program of $1.1 million, contract studies in FY 1975 are planned to obtain and analyse environmental, natural resource, and economic data necessary to support OCS management decision-making including possible revisions of the five-year leasing schedule and to prepare environmental impact statements.

Considerable amounts of time are required in designing and supervising these studies. As our leasing activities expand into new areas, our need for environmental, economic, and resource data increases. Staff members currently carrying out these functions are needed full-time to do the work associated with the accelerated leasing program. As a result of this growing need for data through contract studies, two positions are required for study design and supervision.

(1b) Inventory & Planning for Energy Areas, +$1,050,000 28 Positions

This proposed increase provides for integrating energy development proposals, sites and related facilities into orderly, responsive land use plans for all resource and public values in energy resource areas. Land use plans, called Management Framework Plans, (MFP's) are developed to integrate resource inventory data and information with socio-economic and environmental considerations. Resource opportunities are documented and conflicts between competing uses are identified. The plan shows how these conflicts will be reconciled. The public, state and local governments and interest groups are fully involved in the planning process through consultation and public hearings. The importance of and necessity for comprehensive land use planning for energy areas is illustrated by the magnitude of potential coal and other energy developments proposed in the western United States.

Coal production from Montana, North Dakota, Wyoming and Utah is expected to increase as much as 1,000 percent by 1985, and industry plans indicate a potential for as many as 20 coal gasification plants with thousands of miles of transmission lines, oil and gas pipelines and aqueducts. Reports have predicted that new power plants alone could create up to 25,000 jobs in eastern Montana. New towns, new railroads and highways will add to the competition for land uses resulting from coal and other energy resource developments.

The increase funds will provide for completing MFP's for 11 planning units in coal areas of Montana, North Dakota, Wyoming and Utah; completing resource inventories and MFP's, within one known geothermal resource area in both California and Nevada; and support plans necessary for making power transmission corridor determinations.

Plans that consider all the impacts of energy resource development will pave the way to achieving the goal of providing new supplies of clean energy with full consideration of other resource values.

(1c) Environmental Analysis for Energy Actions +$2,300,000 +86 Pos.

The workload in carrying out requirements of the National Environmental Policy Act for environmental analysis and preparation of environmental impact statements increases proportionately with the emphasis on in-increasing domestic production of energy resources.

For example, oil and gas operations normally involve five distinct phases - preliminary investigations, exploratory drilling, development, production, and finally abandonment. Each of the five phases has specific operations or activities that impact the environment. Whether large or small, each impact must be assessed according to the particular circumstances. The proposed increase aims to mount and sustain a maximum effort to assure that environmental analyses and statements where required are completed in high priority areas, prepare where required before energy resource development begins and without delaying achievement of the National goal of expanded resource production. Of the total proposed increase, $1,400,000 will provide the capability to prepare quality environmental analyses to facilitate upland oil and gas exploration and development associated with BLM leases. The remaining $900,000 of the budget increase will finance preparation of environmental analyses and statements associated with the development of public and private energy sources and their distribution. This workload includes evaluation of the environmental impact of proposed new facilities for which applications are filed. These are facilities closely associated with energy resource developments such as pipelines, transmission lines, railroads, waste disposal areas, rights-of-way, and a variety of land permits for special features (buildings, communications sites, etc.). This workload is estimated at 1,400 environmental analyses, 43 impact statements and review of 140 statements prepared by other agencies.

The Bureau's over-riding responsibility to the public is to assure that critically needed energy resource development on the National Resource Lands is consistent with established principles of multiple-use management, and environmental conservation. The environmental analysis program coupled with BLM's land use planning program (MFP's) is the best means at our disposal to systematically study development proposals, analyze their impact, and identify and prescribe means to mitigate or prevent potential environmental damage. Broad public acceptance of a leasing program which recognizes not only the Nation's energy requirements but its environmental protection responsibilities is essential, and can discourage litigation stemming from the National Environmental Policy Act, which could result in costly delays.

(1d) Upland Energy Minerals Management +$1,330,000 + 35 Positions

Coal, geothermal steam and oil shale programs are being developed to expand the available supply of energy resources through an accelerated program of lease offers. The leasing programs will operate under the controlling principles of multiple use and environmental management and will bring fair market value return to the U.S. Treasury from the sale of energy resources.

Major reserves in coal and oil shale make these resources a key consideration in alleviating energy shortages while geothermal steam provides a clean supplemental energy source of localized significance. The contribution that BLM will make in the development of these resources is evidenced by the proportions of the national coal, oil shale, and geothermal reserves that are found on public lands including: 85% of the low sulfur coal, 72% of the oil shale, 56% of known geothermal areas, and 60% of lands prospectively valuable for geothermal steam.

Coal Leasing ($1,050,000) (35 Positions)

To be responsive to the current and critical need to increase domestic energy supplies, added capability is required to expand development and utilization of our coal resource. The proposed increase will enable us to make reserves on Federal lands available through competitive leasing while assuring that development is carefully controlled to avoid environmental mistakes and irreversible consequences.

With supplemental funding of $500,000 in FY 1974, the Bureau initiated development of a long term coal leasing program for Federal lands. The size, timing and location of coal lease sales are determined through an Energy Minerals Allocation Recommendation System (EMARS). The system relates coal reserves to energy needs by computer modeling techniques. Based upon this relationship lease allocation target recommendations are issued for Federal coal areas on a state by state basis.

Our existing land use planning system is used to determine optimum lease sites within states and establish final allocations. By identifying lease areas in advance and preparing 5 to 10 year schedules for lease sales, the Bureau can keep current with future demands, pre-test reclamation measures, develop effective reclamation stipulations and allow advance planning by industry. The final step in the process is the actual Federal-motion leasing which will begin under an initial schedule in FY 1975 with adequate lease administration and rehabilitation measures.

The increase for 1975 is needed for the following specitic aspects of this process:

- Inventorying and storing information on Federally owned coal reserves for both reserves under lease and potential reserves. Reserves will be ranked according to stripping ratios, proximity of transportation and susceptibility to reclamation.

- Accelerating the preparation of mineral ownership maps for coal states.

- Projection of short and long term regional demand for coal derived BTU's. Federal portions of this demand will then be related to inventoried Federal reserves.

- Selection of lease sites through the Bureau planning system which involves consideration of environmental factors, other resource values, social, economic implications and other possible constraints.

- Preparation of a five year leasing schedule which in FY 1975 will involve reserves in the states of North Dakota, Montana, Wyoming, Utah, Colorado and New Mexico.

- Develop and implement pre and post sale procedures to include analysis of minimum bonus bids.

Geothermal Steam-Oil Shale Leasing (+$280,000) (0 Positions)

Expansion of the Bureau's Geothermal steam and oil shale programs to increase the available supply of these energy resources through an accelerated program of lease offers was financed by a supplemental appropriation of $450,000 in FY 1974. The leasing programs are consistent with and controlled by multiple use and environmental management principles. The supplemental funds were for a six month period beginning January 1, 1974. An additional amount of $280,000 is needed to annualize the costs of these programs in 1975.

With the total funds requested, the Bureau will continue the prototype oil shale program which is designed to (1) stimulate commercial production of oil from shale by private industry, (2) insure the maintenance of environmental integrity in oil shale areas, (3) develop methods and technology for environmental protection, (4) permit an equitable return on investment, and (5) develop lease management expertise for oil shale production. FY 1975 efforts will include monitoring pre-development oil shale operations for adequacy of stipulations and compliance and preparing the required annual progress report on the environmental aspects of developing the six prototype oil shale leases. The first prototype lease was held January 8, 1973 for a 5,000 acre tract in Colorado. The high bid for this one sale alone exceeded 210 million dollars. The other five sales will be held during the remainder of fiscal year 1974 involving one additional tract in Colorado and two tracts each in Utah and Wyoming.

Up to five competitive geothermal steam lease sales will be held in FY 1975. Initial geothermal steam leases scheduled to be awarded in FY 1974 in California and other western states will be administered. In addition, work to prepare environmental impact statements for new leases and to process non-competitive geothermal lease applications on an anticipated 20,000 acres in the 11 western states will be supported.

(1e) Surface Rehabilitation and Protection +2,050,000 +31 Pos.

The development of coal and oil shale will have a considerable impact on the surface environment. In the western States there are more than 100 billion tons of low sulfur coal close to the earths surface in

seams 20 to 250 feet thick which can be strip mined economically. In comparison, oil shale reserves (some 600 billion barrels in gross deposit) will be developed more slowly awaiting analysis of prototype operations to be developed on the six FY 1974 lease sales. The six prototype leases involve 30,000 surface acres containing an estimated 4.3 billion tons of recoverable oil shale. A multi-phase program of protection and rehabilitation is essential to avoid and minimize the effect of large scale mining on the environment. Principle efforts will be directed toward the coal leasing program but will also include oil shale development where current action is required.

Initially, reclamation data such as soils and hydrologic data will be gathered on potential leasing areas to determine reclamation potential or limitations for general land use planning objectives. Reclamation characteristics will affect the determination of actual leasing sites to be developed. As the 5 and 10 year coal lease schedules are developed, data gathering and analysis will become specific to proposed lease sites. Components of reclamation studies include: testing soil in potential leasing areas to determine whether physical and chemical properties are capable of establishing and supporting introduced vegetation, and if not, determining techniques to produce vegetative cover in areas to be rehabilitated; collection of data on the quantity of surface and ground water in potential leasing areas; analysis of overburden by core sampling 1,500 sites to determine strata best suited to support vegetation for stabilizing waste piles; investigating the economics and technicalities of moving, sorting and storing earth and rock material as associated with stripmining operations; and conducting the first phase of socio-economic studies to assess economic impact, water demand, transportation and population effects of large scale stripmining operations.

The reclamation data and analyses on potential coal and oil shale areas in conjunction with specific reclamation technology research being conducted by other agencies will allow pretesting of reclamation effectiveness, aid in making land use decisions to avoid areas where mining would not be acceptable. This work will also provide for development of effective reclamation stipulations and allow better coordination with industry on reclamation needs.

Additional capability is also required to incorporate appropriate protective stipulations in leases and permits and to monitor their compliance. The Council on Environmental Quality and Departmental regulations require the protection and rehabilitation of lands before and after mineral exploration, development, and on-site processing of minerals and minerals materials.

The surface protection component of this increase continues on an accelerated basis of ongoing activities to meet established objectives of: (1) safeguarding the surface resources subject to damage because of onshore mineral leasing and exploration activities on approximately 80 million acres by 1978, (2) initiating technical and compliance examinations on all new permits, leases, and contract areas, (3) performing comprehensive technical and compliance examinations on all cases by the end of FY 1977., (4) fully meeting surface protection requirements on 16 million acres in FY 1975.

Combined rehabilitation and surface protection goals provide for proper environmental consideration of surface impacts in all phases of energy development beginning with the initial planning and continuing through production and reclamation.

(1f) Alaska Pipeline Inspection $1,500,000 0 Positions

The increase provides full-year costs for contract inspection and construction activities for the Alaska pipeline and associated facilities. The Trans-Alaska Pipeline Authorization Act of November 16, 1973 (P.L. 93-153) cleared the way for issuance of pipeline construction right-of-way permits early in 1974. Construction of the pipeline from the North Slope oil fields at Prudhoe Bay to the Terminal port of Valdez on the Gulf of Alaska will begin soon after issuance of the permits. The 48 inch-diameter pipeline project extending approximately 800 miles will be the largest private construction project ever to be undertaken in North America and is expected to cost over 4 billion dollars. The pipeline will contribute significantly toward supplying energy resources in the lower 48 states, ultimately transporting up to two million barrels a day from the North Slope oil fields.

The workload will expand tremendously in the early part of the four year construction period with a gradual deceleration in the last two years. Immediate design review requirements of the pipeline and associated facilities, under a ninety day response requirement, will result in a sudden peak workload for engineering, environmental, and resource skills, that will continue at least through FY 1975. It is expected that several hundred people will be involved in the initial stages of design review. Under the Department of Interior supervision, the 3rd party contractor will furnish technical assistance to complete preliminary and final design review, check compliance with the stipulations, assure engineering quality control, perform spot check inspections of construction, review permittees' quality assurance program, review and oversee procedures and operations for starting oil flow, and review contingency planning.

The 3rd party contract provides the means to react quickly to the fluctuating demands that will be made on overseeing agencies by this huge construction project. The 3rd party concept also readily accommodates the seasonal aspects of the severe northern climatic conditions. Adequate capability is essential to cover the multiple construction operations that will be conducted simultaneously along the 800 mile right-of-way through the fragile Alaska environment.

(2) Recreation Management Programs: The demand for recreation and the variety of recreation pursuits is expanding geometrically. By the year 2000, the population of the United States is expected to more than double; the demand for recreation is likely to more than triple.

The magnitude of demand and the variety of activities in which Americans participate, in essence, is the heart of the Bureau's recreation problems. Recreation use is placing increasing pressure on the National Resource Lands. BLM's role in the recreation management of these lands is to consider recreation as one of many integral parts of a multiple purpose basis giving a balance among recreation and other

uses. This budget proposal for the recreation management of multiple purpose land addresses itself to a number of urgent conditions precipitated by the following statistics:

- Recreation use of public lands has increased from 9 million visitor days in 1964 to 49 million in 1972; eighty million or more visitor days are expected in 1980.

- Six million acres of National Resource Lands are within a forty mile radius of major western population centers having a combined population in excess of 35 million people. Within a three hour drive of these urban centers there are 66 million acres.

- Only 18 full-time field visitor management personnel are available on 172 million acres in the conterminous western states.

- Archaeologic and historic features are being destroyed at an estimated rate of two per day in the California Desert alone.

- Four million off-road vehicles, which have resource destruction potential, use National Resource Lands each year. ORV events with 200 to 2,000 participants are common.

A proposed total program increase of $2,050,000 and 47 positions to bring about a balance between the current situation and management capability in the field of outdoor recreation has two basic objectives:

- To develop and manage systems of visitor control which will assure the health and safety of the using public and the protection of natural resources; and,

- To protect the unique natural and cultural resources on the National Resource Lands as directed by legislation, Executive Order, and other authority.

Program components directed at meeting outdoor recreation objectives are shown below and discussed in detail on the following pages:

Recreation Management Programs

Program	Requested Increase Amount	Requested Increase Positions	Total Program Amount	Total Program Positions
Off-road vehicle management.....	$260,000	7	$610,000	21
Protection of the cultural environment	300,000	4	400,000	9
Wild and Scenic Rivers and National Trails	640,000	8	720,000	12
California Desert management	850,000	28	2,082,000	46
	$2,050,000	47		

(2a) Off-Road Vehicles (ORV's) +$260,000 + 7 Positions

In a short time span, off-road vehicle use has become the recreation activity with the most widespread impact on the National Resource Lands. The characteristics of this pursuit result in a magnitude of management problems that require current action in order to protect the National Resource Lands and resources from irreparable damage, promote the safety of all users, and minimize conflicts among the various users of the National Resource Lands. The program increase will accelerate efforts to control and direct the use of ORV's towards these objectives.

Some four million ORV's including automobiles, motorcycles, trucks, dune buggies, snowmobiles, campers and other vehicles use 150 million acres of National Resource Lands. It is estimated that 20 million visitor days of ORV use occur annually throughout the 11 western states. Intensive use around population centers causes the greatest impact on the land and environment, but extensive widespread use of remote areas also has an equally significant implication on public land management.

At present the Bureau has less than 20 rangers who are trained in ORV management, or if evenly distributed, one for every 7 1/2 million acres. As a result much of the ORV use on National Resource Lands remains uncontrolled and indiscriminate.

In recognition of the widespread implication of ORV use, Executive Order 11644 was issued which defines the ORV workload by requiring each Federal land managing agency to designate and manage areas and trails where ORV's may or may not be permitted. It directs public participation prior to area or trail designations, and requires marking ORV use boundaries with issuance of maps and brochures clearly describing conditions of use.

The increase will be used to designate 35 open ORV areas, and close 35 critical areas susceptable to heavy damage from ORV use, provide maps and brochures delineating open and closed areas that have been designated, patrol closed and restricted areas and issue and monitor permits for up to 150 ORV events in FY 1975. These actions will be in accordance with an inventory and planning effort which considers total land use.

This program will contribute to the protection of the land, environment, and fragile resources as well as provide recreational opportunities for the off-road vehicle enthusiast.

(2b) Protection of the Cultural Environment +$300,000 +4 Pos.

Accelerated use of the public lands has resulted in damaging pressure to archeological and historical features located throughout the West. Access to previously inaccessible sites has been provided by widespread use of off-road vehicles and by construction of roads both to serve the increased use of public resources and to extend public transportation systems. The program increase will support an expanded effort to identify and protect significant cultural values.

It is estimated that some 400,000 archeological sites exists on National Resource Lands. Many are unique in interpreting the Nation's western expansion or the life of early man on this continent. Pony Express stations, early mining towns now abandoned, old military forts, ruins of aboriginal communities, and Indian picture writings are examples of historic and pre-historic values which are rapidly disappearing. At least two sites are destroyed per day in the California Desert alone while irreparable damage is commonly occuring to features such as intaglios (huge figure outlines on the ground surface) along the Lower Colorado River. Pending large scale developments in coal, oil shale and other resources involving surface disturbance add to the urgency to identify cultural values.

Beginning with the Antiquities Act of 1906 and reinforced by the Historic Sites Act of 1935, the Recreation and Public Purpose Act of 1926 and the Historic Preservation Act of 1966, the Federal policy of preserving, protecting and administering cultural resources has been firmly established. To carry out this policy Executive Order 11593 for the Enhancement of the Cultural Environment directs Federal agencies to identify, protect and stabilize archeological and architectural features of significance. The program supported by the proposed increase will include:

- Identification of important cultural features that are in danger of being lost or damaged.

- Providing archeological expertise in critical areas.

- Completion of a cultural inventory on 5% of the public lands in FY 1975.

- Development of contract services with universities, museums, historical societies and other qualified entities to evaluate the most critical known areas and to establish program priorities.

Contracts will include literature searches; development of sampling systems; evaluations of oil shale areas in Colorado, coal fields in Montana and oil and gas areas in New Mexico all involving Indian culture; studies of pre-historic sites in Utah, Idaho and California and analysis of Lower Colorado features.

The urgency of the program is magnified by the rate archeological and historic sites are becoming known and accessible to the general public. The proposed increased activities provide for beginning long range program to protect the cultural environment as well as taking measures for immediate protection in critical and important areas.

(2c) Wild & Scenic Rivers, National Trails and Bicentennial Trails +$640,000 + 8 Positions

This program component is intended to preserve, protect and manage selected rivers and trails in national systems as directed in Public Law 90-542 (Wild and Scenic Rivers Act) and 90-543 (National Trails Systems Act.) The increase also funds BLM's participation in the Nation's

Bicentennial celebration. The Bureau administers portions of 2 designated Wild and Scenic Rivers, the Rogue and Rio Grande, and is involved in the analysis of four rivers classified under P.L. 90-542 as "Study Rivers" for possible designation. BLM lands border at least 10 additional "Potential Study Rivers". Timely and knowledgeable decisions on potential Wild and Scenic Rivers are critical to long range planning to prevent water impoundment or management actions such as timber harvesting which would alter the character of the river.

Exploding use of white water on three potential Wild and Scenic Rivers dictates a need for additional river management. Some 80,000 enthusiasts rafted a popular stretch of the Stanislaus River in California in 1973. The same intensity of use is being experienced on other rivers in the West, including parts of the Colorado and Green Rivers in Utah. Management implications of this growing sport include a need for sanitation and primitive camping facilities, fire prevention measures, hazard identification, provision of launching and take-out places, and visitor management.

Program features of the Wild and Scenic Rivers increase include:

- Management under the terms of the Act of the two designated Wild and Scenic Rivers, the Rogue and the Rio Grande.

- Participate in the evaluation of the Salmon and the Bureau Rivers for possible inclusion in the Wild and Scenic River system.

- Initiate preliminary analysis on additional potential rivers traversing public lands.

- Implement river management on the white water rivers, such as the Stanislaus River in California, and the Upper Green and Colorado Rivers in Utah.

The increase will also provide for development and implementation of a management plan for the Pacific Crest Trail in cooperation with the Forest Service and evaluation of the Oregon Trail for possible inclusion in the National Trail System. The Pacific Crest Trail involves BLM lands in Oregon and California while historic Oregon Trail which carried settlers to the West, traverses National Resource Lands in Wyoming, Idaho and Oregon.

The Bicentennial to be held in 1976 commemorates the 200th anniversary of the United States as an independent Nation. Under this celebration, the Bureau plans to highlight three historic trails -the Pony Express, the Oregon, and the Escalante Trails. The Pony Express epitomizes the romance of opening the frontier and the need for early continental communications; the Oregon Trail was the main route of migration that opened the west; while the Escalante Trail opened up exploration of the four-state area of New Mexico, Utah, Colorado, and Arizona. The program will provide for identification at access points, marking sections of trail on the ground, providing interpretive facilities such as plaques, audio messages, brochures, and maps. Provision will also be made for backpackers or horseback riders to enjoy the experience of

hiking or riding short stretches of trail. The program must be initiated in FY 1975 to be operative in time for the Nation's Bicentennial.

(2d) California Desert Management + $850,000 + 28 Positions

The Southern California Desert is a vast area some 240 miles in length and averaging 100 miles in width. Virtually untouched until recent years, the Desert is now undergoing people pressures that if unmanaged will result in widespread and permanent damage to cultural and natural values including archaeological and historic sites, wildlife, vegetation and watersheds. This program increase will provide more intensive management of the desert area to be supported by land use planning and other resource management as necessary to resolve conflicts. It does not duplicate program features in the ORV and cultural enhancement increases.

Some 11 million people live within a few hours drive of the Desert. From 1968 to 1973, visitor use has increased from 5 million to over 12 million visitor days. As important as the increase in visitation is, the style of use has changed from the original traveler to off-road vehicle enthusiasts and a multitude of other hobbyists.

Some 8 million off-road-vehicle visitor days involving mostly motorcycles, dune buggies, 4-wheel drive vehicles and pickups occurred in the desert last year. Seventy-one desert areas have been designated as either open, restricted, or closed to ORV use. Ten of these areas which are within 100 miles of the Los Angeles metropolitan area receive very intensive use. Other visitors on the desert include rock hounders, campers, picnickers, backpackers, sightseers, amateur archaeologists, etc. Desert activities last year resulted in 140 deaths and 2,000 serious injuries mostly occurring in unmanaged areas. In unregulated situations, the desert visitor is susceptible to many hazards such as abandoned mine shafts, discarded explosives, extreme temperatures, and hazards related to congested use.

Irreplaceable cultural values are being lost at an ever increasing rate due to unmanaged use. The desert contains some 1,000 known petroglyphs. The Mojave Desert section alone includes more pre-historic art than other area in the world. Much of this art is being removed, sometimes with high speed power tools, at a rate that will destroy 80% of the petroglyphs within the next 15 years.

In addition to recreation, the desert provides many other resources and land uses. Major facilities such as power line corridors are being constructed. Each year $160 million worth of minerals are produced. Big and small game are present, including endangered species such as the Desert Big Horn Sheep. Watershed and range values are significant.

This increase will concentrate on visitor management with associated efforts in planning and resource management. Primary activities include:

- Providing visitor management on 12 million acres including the 19 areas designated as "Recreation Lands". Activities will

include increasing patrol activities by enlarging the Ranger staff from 7 to 23: manning the Barstow Way Station to provide interpretive information; visitor management and control; and safety management.

- Protection of archeological values and unique natural areas against inadvertent and vandal related destruction through identification protection and stabilization of significant sites. In addition, contract studies will be implemented with state or private institutions to evaluate important areas.

- Continuing critical off-road vehicle management under the recently initiated "Interim Critical Recreation Vehicle Management Plan". Developing activity plans as required and supervising of the 71 sites designated as open, limited or closed to ORV use and patroling the 10 intensive use areas located within 100 miles of Los Angeles.

- Continued associated planning for the resolution of conflicts between recreation use, mineral development, rights-of-way, fragile resources and other land developments.

- Adjudication of applications made under the public land laws to resolve conflicts of use on desert lands.

Improved management of the Desert will help provide for the safety and enjoyment of the millions of current users as well as help preserve this unique area for the enjoyment of future generations.

These recreation program increases will significantly increase the Bureau's overall capability to manage rapidly expanding recreational use of the National Resource Lands while protecting the lands and their often unique resources for the use and enjoyment of future generations.

(3) Forestry Program (+ $1,425,000) (+ 43 Positions)

The FY 1975 increase of $1,425,000 and 43 permanent positions will provide for marketing an additional 100 million board feet of timber and for a long-term improvement of the level and quality of forest management on National Resource Lands outside Western Oregon. These increased funds are made available by a corresponding decrease in O&C forest management normally funded in this activity. The resulting decrease in the management of western Oregon forests financed by this appropriation will be offset by an increase in the Forest Development, Protection, and Management activity of the O&C Grant Lands appropriation which is made possible by increasing timber receipts from western Oregon in fiscal years 1974 and 1975.

The United States has not been self-sufficient in wood for 50 years and dependence on foreign timber is growing. National timber shortages experienced in recent years are predicted to intensify by 1980.

The Housing Act of 1968 established a 10 year goal of 26 million new and rehabilitated housing units, an average of 2.6 million units per year. Housing construction has accelerated from a pre-1971 average of

1.5 million starts to 2.3 million in 1972. Though housing starts dropped to 1.6 million in 1973, demand for wood products will continue to increase through year 2,000.

Federal forest lands contain 58 percent of the total standing inventory of softwood saw timber. Forest resources on the National Resource Lands excluding western Oregon and Alaska, include 2 million acres of commercial forests and approximately 23 million acres of woodlands.

There is a capacity for additional timber production on Natural Resource Lands by increasing the level of forest management and development. As a basis for an intensive management program, a seven state area is now being reinventoried; forest resources, multiple use and environmental factors studied; and new forest management plans developed for public review. This reinventory of public domain forest lands which was initiated in FY 1972 and is scheduled for completion by FY 1976, will provide the basis for a new annual timber sale offering. offering.

Specific accomplishments with the requested adjustment on behalf of forestry programs outside western Oregon will include:

- Acceleration of the inventory,and study program to develop an intensive forest management plan by 1976.

- Marketing of an additional 100 million board feet of timber in FY 1975. This production will increase Federal receipts by approximately 5 million dollars as the timber is harvested.

- Increasing reforestation and stand improvement activities to improve the quantity and quality of future timber production.

These actions are designed to increase the productivity of forest lands on a long term basis as well as the quality of timber produced. In addition, National Resource Lands will provide an additional supply of timber in FY 1975. Of particular importance is the accelerated development of forest resources while protecting and enhancing otner key environmental components such as clean air, water production, wildlife, and recreation opportunities.

(4) Wild Horses and Burro Program +$300,000 +6 Positions

The proposed increase of $300,000 and 6 positions for FY 1975 will accelerate the program begun in FY 1974 to continue implementation of the Wild Horse and Burro Act (P.L. 92-195), which calls for the protection, control, and management of wild horses and burros. Public interest remains high in preserving these wild and free roaming animals as part of our national heritage.

Early implementation of herd management area plans is critical to maintaining healthy wild horse and burro populations that are consistent with the environment that sustains them. Current estimates of population indicate that approximately 40,000 to 50,000 head of wild

horses and burros roam the Natural Resource Lands versus the original estimate of 27,000.

The major immediate workload that must be accomplished prior to final inventory and planning is the settlement of 1600 private claims now on file for approximately 17,000 animals. Processing of claims under the terms of the Act involves adjudication, public meetings, advertising, joint cooperation with state agencies and supervising of gathering and removal of successfully claimed animals. The act also requires BLM to remove wild horses and burros from private lands upon request. Experience to date indicates a large anticipated workload in gathering and removing animals from private lands and supervising the collections of claimed horses and burros from National Resource Lands. Humane capturing in the wide open plain areas requires detailed planning, construction of facilities, and manpower.

The program increase will facilitate the settlement of claims with priority to be given to critical overstocked areas. Intense inventories will be completed first in areas where claimed animals have been removed. Planning efforts are two fold. First a total land use plan must be developed in herd areas to determine conditions of use that are necessary to balance wild horses and burros with other muktiple uses and secondly, detailed herd management plans will be compiled for specific wild horse and burro areas. Other important activities requiring additional effort are surveillance and protection (including law enforcement), and a public information and education program.

The protection of wild horses and burros requires an intensified application of resource management principles and practices in order to protect and preserve these animals and to maintain their habitat. Immediate additional emphasis to the wild horse and burro program is critical to long term management objectives.

(5) Alaska Native Claims +$1,735,000 + 45 Positions

The proposed increase of $1,735,000 and 45 positions is for land and realty activities required to carry out the Alaska Native Claims Settlement Act (ANCSA). An additional increase of $3,265,000 and 20 positions is requested under the cadastral survey activity to accomplish survey work required to segregate ANCSA land dispositions.

ANCSA sets short time frames for disposing of over 40 million acres of land for village and regional selections to the Alaska Natives. A potential of 98 million acres of remaining state selections under the Alaska Statehood Act has yet to be satisfied. The requirements of ANCSA in addition to the State Selection Program result in a massive realty service workload in Alaska which cannot be postponed or deferred. The act directs the Secretary to promptly issue patents to all persons who have a lawful entry on public lands, in compliance with the public land laws including selections by the state. Major workloads yet to be accomplished include the transfer of lands for village and regional corporations, native allotments, state selections and clearance of encumbrances. It is estimated that the bulk of Native

selections via village corporations will be made in the 12-month period prior to the deadline of December 1974. Regional corporation selections will be made in 1975. A multitude of associated realty actions such as native allotments, homesteads and mineral conflicts must be processed prior to or concurrently with Native selections to achieve orderly disposition of lands.

Time frames for major actions under ANCSA are listed below:

Action	Time Frame
- Withdrawals to implement ANCSA	Completed by deadline of September 1972
- Recommendations by Secretary to Congress on National Interest Areas	Completed by deadline of December 1973
- Village eligibility established	By June 1974
- Determine village entitlement (Acreage according to population etc.)	Immediately after 6/17/74
- Allocation of Land by village and region (Final determination of acreage allowed)	Immediately after 6/17/74
- Additional deficiency withdrawals (unforseen eligibility areas etc.)	Pending village eligibility determination
- Selections completed by Village Corporations (22 million Ac.)	By December 17, 1974
- Conveyance to village Corporations (22 million acres)	Immediately after application by interim conveyance
- Identification of public easements	Prior to issuance of Interim Conveyances for village selections
- Selection by Regional Corporation (16 million acres)	From December 1974 to December 1975
- Conveyance to Regional Corporations (16 million acres)	Immediately after application (by interim conveyances) December 1975
- Miscellaneous grants and Native Group Selections (2 mil. acres)	By December 1975
- Conveyance of Miscellaneous and Group Selection	Immediately after Application (by interim conveyance)

Action	Time Frame
- Native Allotments and other settlement type cases	Simultaneously with Village Regional, Miscellaneous grants and Native Selections.
- State Selections 52.3 million acres in application	Processing as capability will allow.
- 45.4 million acres to be selected	Prior to 1984 with any time frame extensions allowed under ANCSA.
- Public Interest Area Classifications by BLM (45 million acres)	No Deadline

The budgeted increase combined with current capability will provide for accomplishment within prescribed time frames of the following principle actions:

- Supplying status information and resource data to the Natives to assist in village and regional selections.
- Supplying information, data and support to other agencies charged with making studies or recommendations under ANCSA.
- Processing of an estimated 800 village selection applications involving some 22 million acres.
- Processing approximately 160 regional selection applications and 400 cases of miscellaneous grants.
- Concurrently processing 5,600 Native allotment applications.
- Determining disposition of approximately 5,000 to 6,000 additional land or mineral encumberances on land within Native claim selection areas.
- Processing 1,489 applications on files for state selections covering 52.3 million acres.

An additional lands and realty workload in Alaska includes 12,300 existing oil and gas applications and a large number of applications for special Land Use Permits for pipelines, withdrawals, reservations, airports, communication sites, townsites, and rights-of-way.

Installation of an automatic data processing (ADP) system has been initiated to store, sort, retrieve and display land status information for the purpose of maintaining current land status, accurate acreage controls and land case file monitoring.

Specific components of the ADP program are automating acreage control for 40 million acres of village and regional selections, 80 million acres of National Interest Areas, 104.5 million acres for state selections and general land status including all of Alaska (375 million acres). The system also includes docket control for over 23,000 lands and minerals cases and automating available resource information. Five additional positions are included in the total increase to implement these program features.

The total increase of 45 positions will allow BLM to systematically complete the mandatory actions required to keep pace with the time frames of the Act. Timely and knowledgeable decisions are critical to the long term land use situation of the vast Alaskan acreages involved under ANCSA.

(6) Bureau of Employees' Compensation + $13,000 0 Positions

The Bureau has been notified that its assessment from the Bureau of Employees' Compensation will be $332,670 in 1974, an increase of $13,000 over the FY 1973 assessment. An increase is requested to cover these added costs.

(7) GSA Space Costs + $4,710,000 0 Positions

Public Law 92-313, Public Buildings Amendments of 1972, requires that effective July 1, 1974, agencies be charged for space and related services provided by the General Services Administration (GSA) at approximate commercial equivalent rates. The estimated requirement for space and related services in GSA facilities based on rates supplied by GSA is $4,710,000 in this activity.

(8) Annualization of October 1973 Pay Raise $1,054,000 0 Pos.

This proposed increase is required to annualize the October, 1973 pay raise for civilian classified employees in this activity.

Program of Continuing Work

The Resource Management, Conservation and Protection activity provides for the multiple use management of the National Resource Lands including management of energy and mineral, timber, soil and water, livestock forage, fish and wildlife and recreation resources. These direct resource programs are supported by technical functions such as cadastral survey, fire protection, facility and road construction and maintenance, that are funded by other activities and appropriations.

Accelerated public use and demand for resources have intensified management requirements and are adding to continuing workloads in traditional Bureau programs. This workload is administered by natural resource managers who are assisted by technical specialists (wildlife biologists, mining engineers, realty specialists, etc.) and support personnel who plan, develop and implement action programs derived from coordinated multi-resource plans.

The specific programs of continuing work are discussed below:

Lands & Records Management: This program provides for: maintaining public land records in the land offices; providing public land status and information on public land laws and regulations; processing lands and minerals applications for other Federal agencies, state and local governments, and private individuals and accomplishing Bureau-motion realty transactions such as exchanges. Activities include field examination, adjudication, and issuance of various types of leases, and permits.

An increasingly important aspect of the lands program is processing right-of-way applications for utility features, new and expanding power generating facilities to meet rapidly escalating power demands in the West often require construction of transmission lines across many miles of National Resource Lands. Processing these right-of-way applications in accordance with the National Environmental Policy Act and sound land use planning to minimize environmental impacts is becoming an enormous task. Efforts are being expanded to identify common utility corridors but lack of information on compatibility of various types of transmission systems and other factors make planning difficult. Workload on pipeline rights-of-way is also increasing.

A large portion of the Bureau's realty activities are concentrated in Alaska. The Alaska Statehood Act and other Acts provided for selection of over 104 million acres by the State of Alaska. The Alaska Native Claims Settlement Act (ANCSA) of 1971 provided the Native Villages and regional corporations with 40 million acres of selection rights. Additionally, ANCSA provided for other Federal agencies to withdraw up to 80 million acres for areas of National interest.

During Fiscal Year 1974 an estimated 16,000 lands cases will be closed. Fiscal Year 1975 efforts are planned to process 16,500 cases; the accelerated activity is primarily attributed to the ANCSA. At this time, there are over 98 million acres of unsatisfied State Selection Grants in Alaska and over 473,000 acres remaining to be selected by other western States.

Land records improvement work will continue in FY 1975. This includes construction of new land status records in each State Office for replacing original documents as well as preservation of field survey notes.

Minerals Management: The Bureau's mineral program is oriented toward orderly and timely development of non-renewable mineral resources on the National Resource Lands, other lands in Federal ownership and the Outer Continental Shelf. To meet accelerated energy requirements necessitated by the current fuel shortage, the Bureau has expanded efforts to increase domestic production. This program, accompanied by sound land use plans and environmental protection, involves the allocation and disposal of mineral resources by patents, leases, and material sales.

In addition to traditional exploration, mining, and drilling operations for oil and gas on the public lands and Outer Continental Shelf,

increased emphasis and activity has been given to the orderly development of oil shale, coal, and geothermal steam.

During FY 1974, three additional OCS offices were established to conduct analyses, and prepare for possible off-shore leases and sales in the Alaska Gulf, the Pacific coast and in the Atlantic. These new OCS offices complement the New Orleans OCS office which is responsible for oil and gas leasing and development in the Gulf of Mexico.

Six prototype oil shale lease sales are scheduled in FY 1974 (two each in Colorado, Utah and Wyoming) to encourage and stimulate the expeditions development of this energy source by private enterprise. The first lease sale was held January 8, 1974, and attracted seven bidders with a high bid of over $210 million dollars.

Current expanded efforts in coal and geothermal steam provide for the development of energy sources consistent with environmental protection requirements. Since 85% of the Nation's low sulfur coal is on Federal Land and represents one of the most abundant energy resources, the Bureau must manage a coal leasing program to provide for orderly and timely development. Early in FY 1975 it is anticipated that a coal leasing schedule will be issued to guide an effective Bureau-motion leasing program. The Bureau is also participating with other agencies in the Northern Great Plains Resource Program to guide sound decisions considering economic and environmental factors regarding coal and other aspects of energy development in the Northern Great Plains area.

The geothermal steam program is based on continued emphasis of the adjudication of "Grandfather" right applications, preparing environmental analyses, making technical examinations on areas under application, and developing environmental impact statements for sales in Nevada, Oregon,Utah, and California in the near future.

The following table shows the number of mineral leases currently in effect on public land, and the acreage and production by type of lease:

Type of Lease	Number	Acres	Est. Production 1/
Onshore Oil & Gas	93,258	62,961,700	180 million BBL's 2/ 1 trillion cu ft
Offshore Oil & Gas	1,191	5,188,000	420 million BBL's 3.0 trillion cu ft
Coal	531	780,000 3/	12 million tons

1/ 1973 estimates
2/ Includes Federal & Indian Lands
3/ The 780,000 acres contains an estimated 15.1 billion tons based on 80% recovery by surface mining and 5.5 million tons based on 50% recovery by underground mining.

Alaska Pipeline Inspection

Legislation has been passed clearing the way for issuance of the construction permit for this 800 mile pipeline. The Secretary of Interior signed the permit on January 23, 1974. The State of Alaska anticipates issuing its permit about March 1 after which construction can be expected to begin immediately.

The Bureau has maintained a staff since 1969 when the permit application was received in order to carry out pre-construction requirements involving environmental and resource studies, the review of transportation routes, facility sites, gravel and timber needs, rights-of-ways, and monitoring all applicant activities.

In anticipation of imminent issuance of a permit, supplemental funding was provided for additional Federal personnel and costs for a 3rd party inspection contractor in FY 1974. The inspection contractor will review the permittee's designs and assure conformance to the technical and environmental stipulations.

Duties of the 3rd party contractor will include spot inspections of construction, review of plans and procedures for start-up, surveillance of start-up and review of contingency planning.

The Bureau workload involves activities incident to issuance of the right-of-way and associated permits; assisting the authorized officer in enforcing construction and operation guidelines and stipulations; spot checking the supervision of actual construction; coordinating activities of all participating Federal agencies; evaluating overall environmental effects of the pipeline and attendant facilities; and conducting environmental and resource impact studies as necessary.

The successful pipeline right-of-way applicant must reimburse the General Fund of the Treasury for those costs attributable to inspection and surveillance activities directly related to the pipeline.

Range Management

This program involves the application of intensive management to rangelands which comprise a substantial portion of the National Resource Lands. Activities of the program include domestic livestock grazing, wild horse and burro management, and rangeland weed, pest, and disease control.

A special program has been underway since 1965 to improve public range lands through the development of intensive grazing management plans (Allotment Management Plans) with individual ranchers. Planning and implementing AMP's is a cooperative effort between the Bureau and the rancher.

Major objectives of the AMP effort are to increase vegetative cover, increase meat and fiber production, improve soil stability and water quality, increase the production of desirable forage plants and enhance

aesthetic and wildlife values on rangelands. This is accomplished through the control of livestock in such a way that their grazing habits are scientifically applied to improve rangeland conditions. The success of the AMP program is evidenced by the increasing rate that management objectives are being realized and the positive support of wildlife agencies, conservation groups and ranchers. There is a current backlog of 214 AMP's that have been designed but are unimplemented.

The major recurring workload in the range management program which includes maintaining use records, receiving, processing and issuing 22,000 grazing authorizations annually for approximately 12 million animal unit months, and supervising and maintaining existing AMP's limits the effort which can be devoted to developing and implementing new AMP's. Approximately 115 AMP's will be completed in FY 1974 but as few as 20 can be implemented. The table on the following page portrays the situation as of June 30, 1973:

Allotment Management Plan Status
(As of June 30, 1973)

Implemented		Completed-Not Implemented		Total Requirement	
Plans	Acres	Plans	Acres	Plans	Acres
1,015	25,300,000	214	6,000,000	8,300	133,000,000

Additional continuing work involves the implementation of P.L. 92-195 which provides for protection, management and control of wild free-roaming horses and burros on National Resource Lands. Current efforts are underway to complete the claiming of private animals presently on rangelands without authorization. Some 1,600 private ownership claims have been filed on 17,000 horses and burros. These claims, many of which will be difficult and time-consuming, must be processed before a comprehensive horse and burro inventory can be completed. Upon completion, the inventory will provide the basis for an effective management program.

The continuing program of weeds, pests and diseases is one of inventory, evaluation and protection in cooperation with other local, State, and Federal agencies to alleviate livestock and wildlife damages and losses.

Forestry

This program includes a portion of the financing for forest management in western Oregon and for all the forest management and development of forest resources outside of western Oregon. The goal of the Bureau's forestry program is to provide for the multiple use and sustained yield of forest resources while protecting and enhancing aesthetic values. Environmental aspects of timber production are receiving greater consideration because of the rising and often critical values such as clean air, water production, wildlife habitat, recreational opportunities, aesthetic and other public uses.

The Bureau's forest programs are designed to support the Housing and Urban Development Act of 1968 and are carried out in accordance with the National Environmental Policy Act of 1969.

Forest Management-Western Oregon: Funding in the activity together with funding from the O&C Grant Land appropriation enables the Bureau to undertake the most intensive Federal forest management program in the Nation in western Oregon.

Funding for this program within this appropriation will decrease by $1,425,000 in 1975, to finance an accelerated effort in forests outside western Oregon, but will be offset by an equivalent increase in the forest development, protection and management activity of the Oregon and California Grant Lands appropriation. Some 2.4 million acres are managed under the guidelines of a plan that was implemented by the Secretary on July 1, 1971. The plan is responsive to the need for restoring, maintaining and enhancing the quality of the environment as well as increasing yields from timber lands through intensive forest management practices. These intensive practices increase the amount of volume the forests are able to produce, thus, helping to meet the Nation's demand for timber products. With respect to the environment, the plan provides for recreational sites, wild and scenic rivers, streamside protection, protection of critical watersheds and damage-prone sites, and provides for improved forage for wildlife and livestock.

The following table shows volumes, sales prices and receipts in Western Oregon for FY 1971 through FY 1973 and current estimates for FY 1974 and 1975. These include Oregon and California Grant Lands, Coos Bay Wagon Road Lands, and western Oregon Public Domain timber volumes:

	BLM Sales		Receipts	
FY	Million Board Feet	Sales Price a/	BLM	Forest Service
1971	1,235	$ 51,913,000	$ 60,350,000	$ 8,274,000
1972	1,179	65,559,000	72,357,000	8,844,000
1973	1,225	129,469,000	91,044,000	11,084,000
1974*	1,172	87,900,000	108,270,000	15,000,000
1975*	1,172	94,260,000	108,250,000	15,000,000

* Estimates

a/ Receipts vary because payments are made on cutting schedules, not at the time timber is purchased.

The following tabulation shows the source of timber sales receipts by type of lands:

FY	O&C Land a/	Coos Bay Wagon Road Land	Western Oregon Public Domain	Total
1971	$ 63,734,000	$2,616,000	$2,274,000	$ 68,624,000
1972	75,334,000	2,134,000	3,679,000	81,147,000
1973	94,382,000	3,845,000	3,901,000	102,128,000
1974*	115,000,000	3,920,000	4,350,000	123,270,000
1975*	115,000,000	3,865,000	4,385,000	123,250,000

* Estimates

a/ Includes Forest Service receipts.

Forest Management National Resource Lands outside Western Oregon: The forested National Resource Lands, outside western Oregon lands, include approximately 2 million acres of woodlands. Management of these lands has been largely custodial. There is a capacity for increased production, but only through more intensive management.

As a basis for an intensive management program scheduled to commence in FY 1976, a seven state reinventory is underway. Forest resource, multiple use and environmental factors are studied, and new forest management plans developed for public review.

As a means of helping increase the Nation's domestic wood supply, sales totaling 150 million board feet will be offered in FY 1975. This represents an increase of 100 million board feet over the FY 1974 level. The increased production can be harvested without jeopardizing future sustained yield. Completion of the new inventory which is patterned after that applied to western Oregon will help determine an annual allowable cut for the public domain forest lands in FY 1976 and beyond.

Actual FY 1971 through FY 1973 and estimated FY 1974 and FY 1975 volumes, sales prices, and receipts for timber sold from National Resource Lands exclusive of western Oregon are as follows:

FY	Thousand Board Feet	Sales Price	Receipts
1971	72,000	$1,812,000	$2,500,000
1972	66,000	2,280,000	2,372,000
1973	28,200	1,907,000	2,515,000
1974*	50,000	2,500,000	2,530,000
1975*	150,000	7,500,000 **	2,950,000

* Volume to be offered and estimated prices and receipts.
** Reflects increase sales price of $1 million for base 50 MMBF.

Forest Development - National Resource Lands, Outside western Oregon: The immediate objective of this program is to restore producing capacity to forest lands where it has been reduced due to logging, insects, stagnation due to overstocking or other causes. Early establishment of

cover protects watersheds, restores timber production and enhances physical appearance. This effort also suppresses growth of undesirable species of no economic value and reduces fire hazard. The FY 1975 program level will include 2,800 acres of reforestation, 40 acres of site improvement and about 1,600 acres of stand improvement.

Soil and Watershed Conservation: The Soil and Watershed program has three primary objectives: (1) to determine condition and potential of watersheds by using trained personnel and systematic evaluation methods; (2) to protect and improve productivity of watersheds on the National Resource Lands; and (3) to establish and maintain acceptable standards of watershed management to control soil erosion and water yield. This program provides technical data and capital investments in support of other resource management programs conducted on the National Resource Lands, and soil and watershed information for the Bureau's planning system.

Effective land management and treatment practices are dependent upon knowledge of soil stability, water quality and quantity, and environmental considerations in determining the proper location and design of roads, location of rights-of-way, provisions for exploration, extraction, and rehabilitation of mineral deposits, timber harvesting, recreation use and development, fish and wildlife habitat, and rehabilitation of watersheds damaged by fire, flood and other events. Support of these activities requires a watershed program which can:

(1) Determine need and use of a sufficient supply of usable water to permit the long term use, management and development of public land resources.

(2) Design and apply management practices to improve water quality, quantity and timing of yield to provide a controlled yield and quality for the user, and avoid pollution of water flowing through or from National Resource Lands.

(3) Provide technical data on soil and water resources to insure the selection of proper rehabilitation measures on potential energy mineral resource lands destined for development.

(4) Rehabilitate damaged watersheds to restore stability, productivity and proper hydrologic function.

In areas denuded of vegetation, artificial revegetation and other soil conserving practices are required to accomplish desired results. Control of gully, streambank, and streambed erosion often requires special stabilization structures, riprap, sloping and vegetating eroded banks.

The control of soil erosion and water productivity will continue with various practices such as water retention and detention dams, contour furrowing, vegetative manipulation, and weed and pest control practices that affect water quality and quantity.

Watershed conservation program accomplishments, needs and present erosion conditions are reflected in the Tables on the following pages:

CONSERVATION ACCOMPLISHMENTS AND NEEDS OF LANDS UNDER JURISDICTION
of the
BUREAU OF LAND MANAGEMENT

	Units	Inventory of Total Needs 1/	Accomplishments 2/ 1937-1973	Planned 1974	Planned 1975	Remaining Work
Water Control Structures...	Cu. Yds.	242,602,300	30,044,632	65,000	60,000	212,436,668
Other Conserv. Practices 3/	Acres	19,125,900	3,086,369	11,000	200	16,028,331
Undesirable Plant Control..	Acres	121,900	79,680	5,000	2,900	34,320
kevegetation.....	Acres	14,798,000	3,686,388	4,000	2,500	11,105,112
Water Developments.....	Number	85,200	47,647	1,200	1,200	35,153

1/ Inventory of total needs was completed by the Bureau during 1964 and reflected the total needs of the public lands as then identified. The inventory amounts include those listed under "Accomplishments".

2/ Includes all sources; Soil & Watershed, Range Improvements, Fire Rehabilitation, P.L. 566, and Private.

3/ Includes contour trenches, pitting, furrowing, waterspreading, streambank protection, gully control, dune control, and deep tillage.

PRESENT EROSION CONDITION - ACRES AS OF 12/26/73
WATERSHED INVENTORY 1/

	TOTAL STATE	ACRES INVENTORIED	%	STABLE ACRES	%	SLIGHT ACRES	%	MODERATE ACRES	%	CRITICAL ACRES	%	SEVERE ACRES
ARIZONA	11,000,000	6,627,787(60%)	4	263,663	46	3,078,522	40	2,619,596	9	600,732	1	65,274
CALIFORNIA	14,000,000	6,510,812(46%)	15	992,104	44	2,879,167	36	2,329,787	5	302,153	1	7,601
COLORADO	7,000,000	4,851,473(69%)	22	1,086,035	29	1,395,153	39	1,881,312	9	458,976	1	29,997
IDAHO	11,000,000	6,946,982(63%)	21	1,459,115	50	3,448,974	24	1,663,024	5	367,290	1	8,579
MONTANA	7,000,000	5,741,664(82%)	14	824,014	42	2,428,368	31	1,763,295	11	640,718	2	85,269
NEVADA	48,000,000	30,081,942(63%)	8	2,332,877	50	15,069,677	36	10,898,470	6	1,704,342	1	76,576
NEW MEXICO	12,000,000	7,791,716(65%)	6	455,879	30	2,313,633	41	3,195,481	21	1,667,705	2	159,018
OREGON	13,000,000	11,812,134(91%)	17	2,023,515	52	6,112,609	29	3,375,767	2	280,628	1	19,615
UTAH	23,000,000	14,384,688(63%)	6	783,974	41	5,946,584	36	5,096,763	17	2,464,284	1	93,083
WYOMING	16,000,000	10,169,455(64%)	6	625,931	38	3,832,063	42	4,312,093	12	1,219,041	2	180,327
BUREAU	162,000,000	104,918,653(65%)	10	10,847,107	44	46,504,750	35	37,135,588	10	9,705,869	1	725,339

1/ Definition of terms:

stable - only natural geologic erosion occurring.
slight - erosion not sufficient to significantly reduce vegetative productivity.
moderate - erosion which significantly alters vegetative productivity.
critical - erosion causing cessation of vegetative production.
severe - erosion which prevents any vegetative establishment.

Fire Protection: Effective fire protection is dependent upon the early detection and timeliness of the initial attack. This requires adequate equipment and sufficient well-trained manpower to effect control of the fire and reduce damages.

In the past, fire protection activities for 400 million acres of public lands have suffered from inadequate equipment, lack of manpower and shortages of supplies. Fire suppression has also demanded personnel from other programs thus inhibiting planned accomplishments. To correct these deficiencies, the Bureau has completed, and is implementing, initial Normal Year Fire Plans within the limits of available resources.

Fire protection and preparedness programs at the Boise Interagency Fire Center and at other locations throughout the West and in Alaska are financed by this activity. The Fire Center is a specialized joint training and operational unit of the Bureau of Land Management, U.S. Forest Service, and the U.S. Weather Service. The Fire Center arranges backup suppression support consisting of fireline manpower, fire control overhead, and equipment for the Bureau, other Interior Bureaus, the U.S. Forest Service, and certain State Governments on a reimbursable basis.

The Bureau is developing an active program to provide professionally trained personnel, an improved communications system and radio network, better fire control training, and modernized fire equipment. Operation of the Bureau's communications network is primarily financed by this program; however, other programs share in these costs in proportion to the benefits received.

Recreation Management: The Bureau's recreation program is based on planning for and managing the use of the recreation resource values of the National Resource Lands. Ever increasing numbers of visitors are using the National Resource Lands for a variety of recreation pursuits. Visitor use has increased from 9 million days in 1964 to 50 million days in 1973, and may reach 80 million days by 1980. Within a 40-mile radius of the 16 major population centers of the Western United States, the Bureau manages 6 million acres of land, much of which has high recreation potential. Within 3 hours drive, 66 million acres of public land are available to residents of major urban centers. Present energy shortages could create even more use near these heavily populated areas as driving to more distant outdoor recreational attractions becomes more restrained. A program to plan for and manage the orderly use of the recreation resource was initiated in FY 1974 and will continue in FY 1975. Significant recreation programs include providing opportunities in areas of national significance such as in the California-Nevada-Arizona desert, primitive areas, wild and scenic rivers, and protection and enhancement of historical and cultural features. Also, under conditions of increasing use, added emphasis is given to visitor safety, and preservation and protection of impacted resources and environmental values.

More specifically, the recreation program includes inventory, investigation, development and management of National systems such as wild

rivers, trails, and primitive areas. Field examination, data collection, access need determination, interpretive work and program direction for recreation planning are included.

Use supervision involving off-road vehicles and intensive use areas will continue to represent a significant workload. Recreation's input to the Bureau planning system and feasibility studies, impact studies, and preliminary site investigations are all important aspects of the continuing program of recreation management. Within the base level for this program in FY 1975 added emphasis will be given to management of off-road vehicles, the California Desert, National Rivers and Trails, and cultural sites to supplement the increases requested for these programs.

Wildlife Habitat Management: The Wildlife program in FY 1975 will continue to emphasize inventory and analysis preparatory to development of management framework plans. Of equal importance and continued emphasis will be consideration of wildlife habitat in priority energy development areas. Energy mineral development plans contain input from wildlife biologists who specify mitigation stipulations when necessary, and contribute to prescribing appropriate rehabilitation measures.

Habitat management plans are being developed wherever the wildlife resource is a significant consideration, and especially in areas where the habitat is in need of corrective measures such as in the case of rare and endangered species and raptors. A total of 168 terrestrial habitat plans and 11 aquatic plans will have been completed by the end of FY 1974. Development work such as spring development, construction of water catchments, guzzlers and reservoirs, cattle guards and antelope passes is an important part of the habitat management program.

Other continuing work includes cooperation with other agencies in establishing animal damage control areas, and conducting inventories to identify the habitat, migration routes, nesting areas and special problem areas involving fish, waterfowl, large and small game, upland birds, raptors and other species important to ecological balance and health.

2. Cadastral Survey

Analysis by Activity

FY 1973 Amount Available	1974 Amount Available	1975 Estimate	Increase (+) or Decrease (-) 1975 compared with 1974
$7,881,280	$8,624,000	$12,580,000	+$ 3,956,000

2. Cadastral Survey: FY 1974, $8,624,000; FY 1975 $12,580,000; an increase of $3,956,000. This increase consists of the following:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Position	Explanation
(1) +$3,265,000	+ 20	$4,519,000	54	To increase survey capability for meeting the requirements of the Alaska Native Claims Settlement Act.
(2) + 120,000	--	120,000	--	Annualization of October 1973 pay costs.
(3) + 571,000	--	571,000	--	To pay GSA space costs.
+$3,956,000	+ 20			

Cost Factors Involved in Increases

(1) Twenty permanent man-years at an average cost of $20,000 including Alaska differential $400,000; twenty temporary man-years at a average cost of $10,000, $200,000; travel and per diem costs for the additional personel $80,000; rent, communication, supplies, materials and equipment $45,000; contracts for cadastral surveys $2,540,000.

(2) Salaries and benefits, $120,000.

(3) Rent, $571,000.

Need for Increase:

(1) Alaska Native Claims, +$3,265,000 +20 Positions

An increase of $3,265,000 is proposed in FY 1975 for cadastral survey work required in the implementation of the Alaska Native Claims Settlement Act (ANCSA).

In Alaska, the land transfer requirements of the Alaska Native Claims Settlement and the Alaska Statehood Acts add up to a cadastral workload approaching 150 million acres - 40 million acres under ANCSA, 104 million acres under the Statehood Act, and the remainder under various existing laws. Although 10 million acres of state selected lands have been surveyed to date, the remaining workload is tremendous.

Most of the 62 million acres selected to date by the State has yet to be surveyed. Additional cadastral survey efforts are required to provide for the transfer of title under various land laws - including over 9,000 native allotments, townsites, trade and manufacturing sites and mineral patents. Expedient disposition as supported by cadastral survey location for these individual applications is critical to maintaining a total orderly land pattern in conjunction with the massive transfers to be made under ANCSA.

Native Claims rights under ANCSA will require the survey of 40 million acres in about 200,000 tracts. The Act proclaims that"... Settlement should be accomplished rapidly and with certainty, in conformity with the real economic and social needs of the Natives." The basic objective is to meet the requirements of the Act and "immediately patent" lands after selection. Since surveys are required prior to patent to give legal description and location to the land, the urgency to survey quickly becomes compelling. The cadastral survey goal is to be prepared in terms of manpower and equipment to conduct surveys once selections are made.

The Alaska climate, terrain and the extraordinary workload requires a special management approach, unique techniques and specialized equipment. A substantial program of contract surveys will be initiated in FY 1975 in order to react to the large workload under the short time frame of ANCSA and to better adjust to the major fluctuations caused by the seasonal aspects of cadastral survey work in Alaska. Organizational changes have already been implemented to provide the framework for capability needed to prepare contract specifications, monitor, supervise and check large scale survey contracts and to complete any office work necessary to finalize the survey. Survey priorities include village selections, state selections and individual dispositions under the land laws that encumber Native Claim Selections. The proposed increase will provide for accomplishment of an estimated 3,800 miles of line and for the implementation of a contract survey program. Without this additional capability it will take about 35 years to complete the survey requirements of ANCSA.

(2) Annualization of October, 1973 Pay Raise, +$120,000 0 Positions

This portion of the total proposed increase is required to annualize the October, 1973 pay raise for civilian employees.

(3) GSA Space Costs, +$571,000 0 Positions

This portion of the requested increase will provide for payment to the General Services Administration for space and related services in FY 1975 in accordance with the Public Buildings Amendments Act of 1972 (P.L. 92-313). Based on rates supplied by GSA, which approximate commercial equivalent rates, the estimate requirement for space in this activity is $571,000.

Program of Continuing Work

Cadastral Survey:

Cadastral survey is basic to all major resource programs and is the unique responsibility of BLM on National Resource Lands and on public lands administered by the Bureau of Sports Fisheries and Wildlife, National Park Service, Forest Service, Defense Department, etc. The program is essential for land sales, exchanges and transfers, easement acquisitions, and resource product sales. The Forest Service remonumentation program and the identification of National Park and Indian Reservation boundaries are also requiring considerable effort. Reimbursable surveys are performed by a Portland basedfield office in

the states of California, Oregon, Washington, Idaho and Nevada on a priority basis. The Denver Service Center, which has overall responsibility for reimbursable surveys for all states west of the Mississippi River excepting Alaska, performs surveys in the remaining western states. All cadastral surveys east of the Mississippi River are under the jurisdiction of the Bureau's Eastern States Office located in Silver Springs, Maryland.

Cadastral Survey in lower 48 states:

Continuing in FY 1975 will be efforts toward: completing an estimated 2.2 million acres of original and resurveys requested by other agencies; surveying or resurveying 10 million acres of National Resource Lands in support of resource management programs with the goal of providing survey support on a pipeline basis by FY 1979; and refining the formal corner search and evaluation program begun in FY 1973 in forested areas with cadastral survey followup to rehabilitate existing corner evidence or reestablish lost corners. Much of the original surveys were completed prior to 1910 and corner evidence is deteriorating. Continued effort will also be devoted to the accelerating need for oil and gas leasing maps on the Outer Continental Shelf, and surveys required for other energy resource areas.

The long-term potential survey workload necessary to support Bureau programs follows:

	Miles of Survey	Number of Monuments	Man-Years of Survey Effort
Known Survey Needs.....	313,700	619,400	22,953
Potential Additional Survey Requirements depending upon condition of existing surveys.....	210,000	413,000	15,415
Total Potential Needs.....	523,700	1,032,400	38,368

Benefits of the program include the resolution and prevention of trespasses, better public service, more efficient resource management and prevention of further revenue losses. Potential demand in the Cadastral program as shown above would require 100 years to complete at the present funding and manpower capability.

Alaska Cadastral Survey:

Two legislative actions have brought about a massive survey workload involving the more than 345 million acres of unsurveyed lands in Alaska. The Alaska Statehood Act granted the state 104 million acres through selection, and the Alaska Native Claims Settlement Act provides 40 million acres for native allotments and townsites, trade and manufacturing sites, etc.

Selected lands must be surveyed before patents can be issued, and special surveys must be made to provide for title transfer under various public land laws and ANCSA.

The current status of the State Selection survey program is as follows:

Acres patented	6.0 million
Acres on which survey plats are compiled and approved.	8.1 million
Acres field surveys completed	9.7 million
Acres requiring field survey	37.8 million
Total acres selected to date (12-31-73)	61.6 million

To augment the continuing program of Alaska surveys performed by BLM surveyors, our Alaska survey organization is being realigned during 1974 to develop, administer, and monitor an extensive program of contract surveys as discussed in the program increase section.

3. Firefighting and Rehabilitation

Analysis by Subactivities

	FY 1973 Amount Available	FY 1974 Amount Available	FY 1975 Estimate	Increase (+) Decrease (-) 1975 compared with 1974
(a) Firefighting...	$23,242,766	$4,800,000[a/]	$4,800,000	-----
(b) Rehabilitation.	599,357	1,600,000	600,000	-$1,000,000
Total.....	$23,842,123	$6,400,000	$5,400,000	-$1,000,000

a/ Does not include a request of $21,000,000 in supplemental funds to be transmitted separately.

3. Firefighting and Rehabilitation: FY 1974, $6,400,000; FY 1975, $5,400,000; a decrease of $1,000,000 of which consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(a)-$1,000,000	--	$600,000	--	Decrease equal to FY 1974 supplemental appropriation for fire rehabilitation due to unusually severe 1973 wildfire damages in the western states.

Program of Continuing Work

Firefighting: Funds will be used for emergency presuppression and suppression of fires originating on or jeopardizing the National Resource Lands, as well as other lands administered by agencies within the Department of the Interior. The Bureau cooperates closely with other agencies in its fire control efforts. Improved firefighting techniques, equipment and materials are constantly being tested for detention and mop-up: high altitude thunderstorm detection, air-drop of water and chemical fire retardants, and the use of smokejumpers, helitack crews, and aircraft are among the measures used to increase firefighting effectiveness.

Salaries of permanent employees used for fire suppression on an emergency basis during regular duty hours are budgeted in normal program work.

The number of fires in the 1973 fire season approximated 2,600 and compared to an historical average of 1,800 fires. In the conterminous western states an unusually wet spring followed by very dry conditions in the summer and fall made 1973 one of the worst fire years on record; in Alaska fire incidence was well below recent years.

Lower 48 states: Nearly 2,050 fires were reported in 1973; they burned approximately 600,000 acres, three times the last five-year's average. Idaho, Nevada, California, Arizona, and Oregon suffered above average losses.

Alaska: In 1973, there were a total of 450 fires which burned 50,000 acres. This compares with 1,040,000 and 800,000 acres burned in 1971 and 1972, respectively.

Fire Rehabilitation: In this effort, the Bureau conducts emergency rehabilitation work in burned areas to reduce resource and economic losses. Without adequate and timely rehabilitation following wildfires, exposed soil is vulnerable to wind and water erosion, and streams are polluted by silt and debris.

Watersheds may be permanently damaged resulting in reduced water retention and production capability. Prompt protection of the soil mantle by restoration of the vegetal cover maintains productivity and retards invasion of undesirable vegetation.

The requested funding level of $600,000 is the same as has been requested annually since 1968. It represents an adequate program for a typical fire year, but if more extensive fire damage occurs, supplemental funding is required. However, the timing of the appropriations process does not permit the most effective implementation of rehabilitation practices to properly protect fire ravaged lands. Because of a particularly bad fire year in FY 1974, the regular fire rehabilitation appropriation was sufficient to cover only one-third of the identified need. A supplemental appropriation of $1,000,000 was provided. On the other hand, in the 1968 - 1971 seasons, the regular appropriation has been adequate to cover fire rehabilitation needs.

4. General Administration

Analysis by Activity

FY 1973 Amount Available	1974 Amount Available	FY 1975 Estimate	Increase (+) or Decrease (-) 1975 compared with 1974
$2,966,490	$3,423,000	$4,151,000	+ $728,000

4. General Administration: FY 1974, $3,423,000; FY 1975 $4,151,000; and increase of $728,000 which consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) +$200,000	+ 5	$3,623,000	187	To meet increased administrative workload associated with increased program activity.
(2) +$452,000	-	452,000	-	To pay GSA space costs.
(3) +$ 76,000	-	76,000	-	Annualization of October pay raise.
$728,000	+ 5			

Cost Factors Involved in Increases

(1) Supplies, materials and equipment, $35,000; additional computer time and operating expenses, $100,000; five man-years @$13,000; $65,000.

(2) Rent, $452,000.

(3) Salaries and benefits, $76,000.

Need for Increase:

General Administration, + $728,000 + 5 Positions

The proposed increase is required to enable Bureau administrative capability to keep pace with expanding resource programs, provide payment to GSA for space and related services and annualize costs of the October, 1973, pay raise for employees.

(a) Administrative Support, ($200,000)

Administrative support is crucial to effective utilization of other proposed increases in resource management programs. This added capability will provide financial, personnel and property management, automated data process, procurement and contracting support necessary to keep pace with administrative requirements of expanded resource programs. These requirements include: providing payroll input to the Bureau's automated payroll system for new employees required for other program increases; processing vouchers associated with an increased number of obligation and payment documents; preparing bid invitations and contracts resulting from expanded contracts related to energy, recreation, and cadastral survey programs, and added personnel services requirements.

(b) GSA Space Cost, ($452,000)

This portion of the requested increase will provide for payment to the General Services Administration for space and related services in FY 1975 in accordance with the Public Buildings Amendments Act of 1972 (P.L. 92-313). Based on rates supplied by GSA, which approximate commercial equivalent rates, the estimated requirement for space in this activity, $452,000.

(c) Annualization of October Pay Raise, ($76,000)

This portion of the total proposed increase is required to annualize the October, 1973, pay raise for civilian employees.

Program of Continuing Work:

The General Administration activity includes the executive direction and administrative support functions consisting of financial management, personnel management, management analysis, procurement, and property management.

Emphasis is placed upon the use of automated systems to accomplish repetitious and routine support work such as payroll, maintenance of ledgers, accounts and equipment inventories, preparing monthly

management reports, and maintaining current information on the progress of work programs and the status of operating budgets, and to provide management with necessary administrative support services. The objective is to provide adequate professional administrative support to all Bureau programs. Other appropriations which receive common services from general administration will continue to be charged at the rate of five percent to the benefiting activity.

Management of Lands and Resources
Personnel Summary

	1973 Actual	1974 Est.	1975 Est.
Total number of permanent positions	3,139	3,437	3,783
Full-time equivalent of other positions	1,812	957	1,077
Average number of all employees	4,793	4,196	4,634
Average GS grade	9.0	9.0	9.0
Average GS salary	$13,866	$14,527	$14,527

ITEMIZATION OF ESTIMATE

Management of Lands and Resources

	Actual 1973	Estimate 1974	Estimate 1975	Increase(+) Decrease(-)
Program & Financing:				
Total obligations...	$97,228,169	$97,061,204	$129,034,000	$ 31,972,796
Unobligated balance lapsing.....	190,471	----	----	----
Transferred to other accounts.....	284,379	424,000	----	- 424,000
Unobligated balance, beginning of year..	- 1,241,223	- 103,204	----	+ 103,204
Unobligated balance, end of year.....	103,204	----	----	----
Appropriation.....	96,565,000	97,382,000	129,034,000	+31,652,000
Obligation by Objects:				
11.0 Personnel compensation.....	56,763,000	55,462,000	64,002,000	+ 8,540,000
12.1 Personnel benefits: Civilian employees.....	6,452,000	6,682,000	7,760,000	+ 1,078,000
21.0 Travel and transportation of persons.....	4,168,000	5,165,000	6,210,000	+ 1,045,000
22.0 Transportation of things.....	2,586,000	2,391,000	3,186,000	+ 795,000
23.0 Rent, communications, & utilities.....	3,455,000	3,460,000	9,300,000	+ 5,840,000
24.0 Printing & reproduction...	506,000	500,000	718,000	+ 218,000
25.0 Other services.	12,443,000	14,282,000	27,166,000	+12,884,000
26.0 Supplies & materials.....	6,536,000	5,923,000	6,905,000	+ 982,000
31.0 Equipment.....	1,968,000	1,839,000	2,100,000	+ 261,000
32.0 Lands & structures.....	1,259,000	1,300,000	1,735,000	+ 435,000
41.0 Grants, subsidies, & contributions	2,000	2,000	2,000	----
42.0 Insurance claims & indemnities..	5,000	12,000	20,000	+ 8,000
Subtotal.....	96,143,000	97,018,000	129,104,000	+32,086,000
95.0 Quarters & subsistence charges	- 52,840	-60,000	-70,000	- 10,000
Total obligations...	96,090,160	96,958,000	129,034,000	+32,076,000

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Appropriation, 1974		$6,800,000
Unobligated balance from prior years		2,862,000
Total available for obligation		$9,662,000
Decreases:		
Construction of buildings and recreation facilities	$5,912,058	
Maintenance of buildings, recreation facilities and roads	3,749,864	
Subtotal	$9,661,922	
Increases:		
Construction of buildings and recreation facilities	$1,703,000	
Maintenance of buildings and recreation facilities and roads	4,952,000	
Total available for obligation (Budget Estimate FY 1975)		$6,655,000

Construction and Maintenance
Analysis by Activities

Activity	Amount Available 1974	Fiscal Year 1975 Estimated Total Available	Fiscal Year 1975 Unobligated Balance From 1974	Fiscal Year 1975 Budget Estimate	Total Available 1975 compared to total available 1974
1. Construction	$5,912,058	$1,703,000	--	$1,703,000	-$4,209,058
2. Maintenance	3,749,864	4,952,000	--	4,952,000	+ 1,202,136
Total	$9,661,922	$6,655,000	--	$6,655,000	-$3,006,922

1. Construction

Analysis by Subactivities
Fiscal Year 1975

Subactivity	Amount Available 1974	Estimated Total Available	Unobligated Balance from 1974	Total Estimate	Total available 1975 Compared to total
Buildings	$3,265,999	$ 690,000	-0-	$ 690,000	$-2,575,999
Recreation Facilities	2,646,059	1,013,000	-0-	1,013,000	-1,633,059
Total	$ 5,912,058	$1,703,000	---	$1,703,000	$-4,209,058

1. Construction: Fiscal Year 1974, $3,235,000; Fiscal Year 1975, $1,703,000; a decrease of $1,532,000. This program provides for the construction of (a) buildings and (b) recreation facilities.

(a) Building Construction: Fiscal Year 1974, $2,035,000; Fiscal Year 1975, $690,000; a decrease of $1,345,000 exclusive of carryover funds. The FY 1975 building construction program consists of the following:

Location	Type of Building	Prior Years	Request FY 1975
1. Bureauwide	Survey and Design	-	230,000
2. Anchorage, Alaska	Anchorage District Complex, Conversion of Existing Warehouse	800,000	210,000
3. Price, Utah	Remodel District Office, Heating and Electrical	-	60,000
4. Oregon	Drewsey Repeater, Radio Building Construction	-	10,000
5. Completion of work in Progress		-	180,000
Total		800,000	690,000

A description of the building construction projects proposed for FY 1975 follows:

1. Survey and Design of Future Facilities $230,000

The FY 1975 proposed program will provide the survey and design efforts that will meet both present and future building construction needs in locations having inadequate facilities and a lack of available space. This funding level coupled with the current and proposed construction program, will reduce the backlog of critical administrative and special purpose facility needs.

2. Anchorage District Office Complex, Anchorage, Alaska $210,000

Because of increased workloads in the Anchorage District involving implementation of the Alaska Native Claim Settlement Act, fire control and preparation for the impending Trans Alaska Pipeline, personnel levels of the Anchorage District have increased and more office space is needed. This involves the conversion of existing warehouse space to offices for employeees and follows the construction of a new warehouse at Anchorage in FY 1974.

3. Price District Office, Price, Utah $ 60,000

This is primarily a remodeling project to correct inadequate electrical and heating systems in the present building.

4. Drewsey Repeater, Radio Building Construction, Oregon $ 10,000

This building will be utilized to house two-way radio communications equipment at a remote repeater location. This building and radio equipment are necessary to maintain adequate radio coverage for fire operations and other communication needs.

5. Completion of Work in Progress $180,000

The funds are requested to cover estimated cost over-runs on prior year projects including a new warehouse in Anchorage, Alaska ($75,000) and new district offices in Shoshone, Idaho, ($30,000); and Las Vegas, Nevada ($75,000). Rapidly rising costs of construction and project modifications have made initial costs estimates of work insufficient to complete the projects as planned. The modification at the Shoshone Office is because of the lava rock in the area. It is necessary to grade the whole complex which will require explosives, even though only the office building will be constructed. The grading is necessary at this time to avoid the use of explosives adjacent to a completed building in constructing the remainder of the complex.

Increased costs associated with the Anchorage Warehouse and Las Vegas Office Complex are attributed to rising costs for materials, labor and increased contract administration by BLM. Some material costs have increased over 100% since August, 1973 and construction labor has also increased substantially. Materials cost increases are due to increased demand, and the scarcity of cement, brick, plumbing fixtures, reinforcing bars, insulation materials and fuel.

(b) Recreation Facility Construction: FY 1974, $1,200,000; FY 1975, $1,013,000; a decrease of $187,000. The purpose of this proposed construction program is to accommodate existing use in specific areas for recreation activities. New recreation construction is required to help reduce the imbalance between the actual use of the public lands for outdoor recreation and the number of facilities available to accommodate this use.

Each year increasing demands are made upon the public lands to provide recreational opportunities to the rapidly growing population in the

Western States. The total visitor use on the public domain, amounting to 49 million visitor days in FY 1972, is expected to exceed 80 million visitor days by 1980.

Intensive use (facility oriented) recreation on the public domain is estimated to be 16 million visitor days in 1974, and is expected to reach 23 million visitor days by 1980. The One Time Use (OTU) capacity of current BLM recreation developments is 16,783. With the addition of facilities to be constructed in FY 1974 and FY 1975, the OTU capacity will be increased by 530 to a total of 17,313. The facilities, existing in FY 1974, if used to capacity for the entire season, could accommodate approximately 15% of facility oriented intensive use of the National Resource Lands.

Without basic recreation facilities, the land surface is abused, streams are polluted, trash is scattered, wildfires result from fires built in hazardous areas, and lack of sanitation facilities create hazards to health. Unless steps are taken to provide new facilities and correct present sanitation and health problems, the sanitation and protection problems of the public lands will grow to unmanageable proportions.

The proposed FY 1975 construction program includes construction in the most critical areas to help alleviate unaccommodated visitor use and protect natural resources. The major efforts are oriented to providing facilities subject to use by urban populations and to complete projects already under construction. The total program is shown in the following table.

Recreation Construction, FY 1975
Projects

State	County	Project	Cost Estimate	Family Units or Other Features	One Time Use Capacity
1. All States	-	Survey & Design of Future Sites	$210,000	-	-
Projects Partially Completed					
2. Arizona	Mohave	Virgin Canyon	300,000	117 Overnight Units to complete)	530
3. Calif.	Imperial	Imperial Sand Dunes	160,000	Water & Sewer System Dev.	0
4. New Mexico	Taos	Rio Grande	120,000	12 Vault Toilets	0
5. Utah	Kane	Paria Canyon	50,000	Entrance Station	0
6. Idaho	Twin	Salmon Dam	40,000	Protective Fence	0
7. All States	-	Completion of work in progress	133,000	-	-
Totals			1,013,000		530

1. Survey and Design - All States

The funds will provide for the survey and design of future recreation facilities needed to support the ongoing management program and the proposed management increase. Construction surveys will be directed to areas incurring the highest use and requiring basic sanitation facilities.

2. Virgin Canyon - Arizona

This is a joint project between BLM and the Arizona State Highway Department which is constructing an interchange near the Virgin Canyon Recreation Lands to serve as a rest area (along Interstate Highway 15). It is the only roadside camping area serving the 150 mile distance between St. George, Utah, and Las Vegas, Nevada. The joint program is designed to control and manage the use in the whole area by providing sanitation and camping facilities and a jump-off point for extensive use of the area. A water distribution system, power transmission lines and an interior road net are in the FY 1974 Budget. FY 1975 funding is required to provide 117 family units, 5 comfort stations, a contact station, a trailhead facility and an interpretive overlook.

3. Imperial Sand Dunes - California

This will provide water and sanitation facilities for phase II of the Imperial Sand Dunes Development. Recreation use on this area averages 6,000 visitors per weekend day, and over 35,000 for a long weekend. Despite the intensive use, there are presently no sanitary facilities for the off-road-vehicle enthusiasts who use the site.

4. Rio Grande Gorge - New Mexico

Funds are needed to provide 12 vault toilets to replace the existing pit toilets which do not meet the state sanitation standards. These toilets service the campground located adjacent to the visitor center. Interpretive displays for the visitor center will also be provided Project visitation after completion is estimated at 100,000 visitors per year. Approximately 40,000 visits are anticipated annually at the visitor center.

5. Paria Canyon - Utah

FY 1975 funding will provide for construction of an entrance station designed to help insure the safety of the 5,000 visitors annually entering Paria Canyon at its main entrance in Southern Utah. It will consist of a trailer office, water supply, two vault toilets, parking area, and garbage cans. Since the canyon is subject to severe flash floods, it is necessary to have the main entrance manned to warn visitors of impending floods. The station will also be used to control the number of people entering the area, thereby preventing damage from overuse.

6. Salmon Dam Campground - Idaho

The Salmon Falls Reservoir is a very productive fishery which is open to year-round use, including ice fishing and ice boating as well as the usual uses associated with water based recreation. The site is located ten miles west of U.S. 93 and Rogerson, Idaho, near the Salmon Falls Reservoir dam site. It is within easy access for the 350,000 people in the Boise - Twin Falls complex. Fourteen campsites are being provided in FY 1974. Funds are required in FY 75 to provide protective fencing (including some areas of chain link fence along a steep cliff).

7. Completion of Work in Progress

Rapidly rising costs of construction have made initial cost estimates of work insufficient to complete several developments. Increase in pay costs and the pace of construction have also increased the cost of contract supervision by BLM. Unforeseen contingencies and project modifications have also had an impact on available construction capabilities. The funds requested in this category will allow the Bureau to complete work on the Squaw Lake Recreation Site ($30,000), and Barstow Way Station ($103,000).

2. MAINTENANCE

Analysis by Subactivities
Fiscal Year 1975

Subactivity	Amount Available 1974	Estimated Total Available	Unobligated Balance from 1974	Budget Estimate	Total available 1975 compared to total available 1974
Buildings	$ 538,000	$ 746,000	---	$ 746,000	$+ 208,000
Recreation	1,491,156	2,147,000	---	2,147,000	+ 655,844
Roads	1,720,708	2,059,000	---	2,059,000	+ 338,292
Total	$3,749,864	$4,952,000	---	$ 4,952,000	+$1,202,136

2. Maintenance: Fiscal year 1974, $3,565,000; fiscal year 1975, $4,952,000 an increase of $1,387,000. The increase requested for FY 1975 consists of the following:

	Increase (+) or decrease (-) Amount	Positions	Total Amount	Program Positions	Explanation
(a)	+$ 208,000	+ 2	$ 746,000	11	To provide for the corrective and preventative maintenance of buildings, parking lots, outdoor storage areas, loading docks, fences & grounds.
(b)	661,000	+ 4	2,147,000	23	To provide for periodic maintenance of developed recreation sites. Also includes maintenance related to hazard reduction.
(c)	518,000	+ 4	2,059,000	45	To provide for the preventative and corrective maintenance on access roads under Bureau jurisdiction.
	+ $ 1,387,000	+ 10			

Cost Factors Involved in Increase

(a) Two permanent man-years at an average annual cost of $16,000, $32,000; Five temporary man-years at an average cost of $10,000, $50,000; Travel, transportation of persons, supplies and materials and equipment, $15,000; contractual maintenance services $111,000.

(b) Four permanent man-years at an average annual cost of $16,000; $64,000; Fifteen temporary man-years at an average cost of $10,000, $150,000; Travel, transportation of BLM persons and per diem at an average cost of $500, $9,500; Supplies and materials, equipment, rent, communications and utilities, $40,000; contractual maintenance services, $397,500.

(c) Four permanent man-years at an average annual cost of $16,000; $64,000; Ten temporary man-years at an average cost of $10,000, $100,000; Travel, transportation of BLM persons and per diem at an average cost of $1,000, $14,000; Supplies, materials and equipment, $30,000; contractual maintenance services, $310,000.

Need for Increase:

(a) Building Maintenance: This increase of $208,000 including $30,000 for October, 1973 pay raise costs and 2 permanent positions in FY 1975 will permit the Bureau to work towards achieving an acceptable building maintenance standard for building space of 960,000 square feet in 859 existing structures. This increase will help satisfy the Bureau's current existing building maintenance needs, and provide for

up-grading maintenance on existing structures as well as the care and upkeep of new facilities scheduled for construction in FY 1974.

The present building maintenance program funding and personnel levels need to be increased to have a safe and healthy environment in which government employees may work and serve the public. Not only are some structures deteriorating at an increasing rate due to inadequate maintenance, but in many cases they will not meet the minimum national health and safety codes.

Increases in costs for maintenance services, materials and supplies have resulted in a decrease in actual maintenance accomplished on structures at past years funding levels. This is compounded by the fact that many BLM operated buildings are in a deteriorated state, having been built as early as the 1930's.

In addition to direct maintenance of buildings, other features such as parking lots, outdoor storage areas, loading docks, fences and grounds require increased emphasis.

Improved levels of maintenance will correct unsafe and poor working conditions, help extend the usefull life of all affected structures and enhance their utility and appearance for the public which they are intended to serve.

(b) Recreation Maintenance: This increase of $661,000 including $35,000 of pay raise costs, will help improve the maintenance of the 195 existing developed sites plus 2 sites to be constructed in FY 1974. It will, through a program of hazard reduction, reduce the number of deaths and serious injuries incurred on public lands.

Each year increasing demands are made upon the public lands (particularly in the California Desert and Lower Colorado River) to provide recreational opportunities to the rapidly growing population in the Western States. The sheer numbers of people using the relatively few developed sites require accelerated maintenance schedules to keep pace with the need for clean-up and repair. The funding level for recreation facility maintenance has not and is not keeping astride of previously constructed facilities, and rising costs of materials.

Increased emphasis is also planned to reduce the number of deaths and serious injuries related to public land recreation in BLM areas of most intensive public use. In these areas, an estimated 400 hazards will be eliminated, neutralized or reduced. This will be accomplished by fencing, signing, or filling mine shafts and other hazards. Cooperative efforts with organized user groups such as ORV clubs, community service organizations, youth clubs, and others, are expected to increase the effectiveness of this increase by fifty percent.

(c) Road Maintenance: The FY 1975 program proposes an increase of $518,000 which includes $30,000 in pay raise costs, and 4 permanent positions to maintain approximately 7,400 miles of roads and trails on a periodic schedule. This increase will help begin to properly maintain the 44,000 miles of existing roads on National Resource Lands.

Use of the public lands road system continues to increase each year. Much of the Bureau's road system is in poor condition and poses serious safety problems because the roads are increasingly used by visitors who are unfamiliar with local conditions. Also, inadequately maintained roads have an environmental impact which far exceeds the immediate land they occupy. Erosion, caused by poor drainage or improper grades, can influence water quality for many miles downstream. Poorly maintained roads also result in heavy rutting, land slides and other degradations of outdoor surroundings.

The total Bureau road system contains approximately 44,000 miles, most of which have never been graded or drained. As little as 20% of BLM's road system is maintained in some States. Roads built by the CCC's in the late 1930's have deteriorated to the point where they must be replaced; the current road maintenance capability is insufficient to upgrade these unsafe roads or road structures.

Status of road maintenance for Bureau controlled roads is as follows:

Maintenance Requirements for Roads on the Public Lands

	Miles	Maintenance Costs
1. Roads Improved by Grading or Draining:		
a. Total miles to maintain	9,500	
b. FY 1974 budget	5,150	$ 1,391,000
c. FY 1975 proposed budget	5,650	1,909,000
2. Unimproved Roads Used by the Public:		
a. Total miles to maintain	34,500	150,000
b. FY 1974 Budget	1,720	150,000
c. FY 1975 proposed budget	1,720	150,000
3. Total		
a. Miles to maintain	44,000	
b. FY 1974 budget	6,870	$ 1,541,000
c. FY 1975 proposed budget	7,370	$ 2,059,000

Adequate road maintenance reduces long-run costs by protecting the investment in roads and provides more efficient land and resource management through improved access. Safety hazards for all users are greatly reduced along with the possibility of adverse court decisions and public criticism. Usable roads also tend to protect the more fragile areas from unregulated use by directing the public into areas which can absorb use pressure and which possess adequate facilities.

Program of Continuing Work: The Bureau's maintenance efforts will be directed toward insuring that, insofar as possible, facilities are adequately cared for to: (1) provide for the safety of employees and the visiting public, (2) extend the useful life and utility of existing structures and other capital investments and, (3) enhance the efficiency of resource management and related administrative and technical support functions.

Building Maintenance: In FY 1975 the Bureau will increase efforts to maintain BLM-owned buildings and related structures and grounds to make them safe, attractive and convenient for public use. An average of $.57 per square foot is now being spent for the care and upkeep of Bureau space which is less than one-half the average for other government and private facilities.

Recreation Facility Maintenance: Recreation sites (197) will be periodically maintained to satisfy increasing visitor use
To the extent possible, efforts also will continue to be directed to the cleanup of undeveloped sites, roadsides and waterways on the public lands. The Johnny Horizon anti-litter campaign will also continue to receive emphasis in FY 1975 to enlist public support and direct contributions in the cleanup and maintenance of our public land environment.

Road and Trail Maintenance: Approximately 7,400 miles of roads and trails will be maintained on a period schedule with the base level program. Frequency of maintenance will be governed by the volume of public use, the nature of use, and the relative levels of investment in these transportation facilities.

Construction & Maintenance
Personnel Summary

	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions.....	100	100	110
Full time equivalent of other positions.	92	103	133
Average number of all employees.....	187	198	234
Average GS grade.....	9.0	9.0	9.0
Average GS salary.....	$13,866	$14,527	$14,527

ITEMIZATION OF ESTIMATE

Construction and Maintenance

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) Decrease (-)
Program & Financing:				
Total obligations...	$5,641,670	$9,661,922	$6,655,000	$-3,006,922
Unobligated balance available start of year.....	- 738,592	-2,861,922	-----	+2,861,922
Unobligated balance available end of year.....	2,861,922	-----	-----	-----
Appropriation.....	$7,765,000	$6,800,000	$6,655,000	$- 145,000
Obligation by Objects:				
11.0 Personnel compensation.....	$2,232,000	$2,297,000	$2,711,000	+ 414,000
12.1 Personnel benefits: Civiliam Empl..	207,000	216,000	227,000	+ 11,000
21.0 Travel & Transportation of persons.....	144,000	150,000	160,000	+ 10,000
22.0 Transportation of things.....	260,000	300,000	320,000	+ 20,000
23.0 Rent, communications, and utilities.....	55,000	60,000	70,000	+ 10,000
24.0 Printing and reproduction...	16,000	20,000	25,000	+ 5,000
25.0 Other Services.	1,017,000	4,375,000	1,524.000	-2,851.000
26.0 Supplies & Materials.....	414,000	450,000	500,000	+ 50,000
31.0 Equipment.....	110,000	100,000	125,000	+ 25,000
32.0 Lands & Structures.....	1,192,000	1,700,000	1,000,000	- 700,000
Subtotals	5,646,670	9,668,000	6,662,000	-3,006,000
95.0 Quarters and Subsistence Charges.....	- 5,000	- 6,000	- 7,000	- 1,000
Total Obligations...	5,641,670	9,662,000	6,655,000	- 3,007,000

PUBLIC LANDS DEVELOPMENT ROADS AND TRAILS

Liquidation of Contract Authorization

Analysis by Activities

Activity	Actual 1973	Estimate 1974	Estimate 1975	Increase or Decrease
Public Lands Development Roads and Trails.....	$3,265,000	$4,000,000	$4,070,000	$+70,000

Status of Appropriation for Liquidation of Contract Authorization

	1973	1974	1975
Appropriation.....	$3,265,000	$4,000,000	$4,070,000
Unexpended balance brought forward.....	411,473	158,730	158,730
Total Available.....	$3,676,473	$4,158,730	$4,228,730
Less: Expenditures	$3,517,743	$4,000,000[a/]	4,070,000a/
Unexpended balance	158,730	158,730	158,730

a/ Estimated

Need for Liquidating Cash Appropriation: The Public Lands Development Roads and Trails program derives its obligating authority from the contract authority contained in the various Federal Aid Highway Acts; however, an appropriation of liquidating cash is required to make contract payments.

Since the first time that contract authority was provided in the Federal Aid Highway Act of 1962, the cumulative liquidating cash appropriation has been less than the cumulative amount of programmed budget authority. This approach is possible because of the time lag which usually occurs in construction projects between the date of contract obligation and the subsequent date of disbursement of funds to make progress payments under the contract.

An increase in the liquidating cash appropriation of $70,000 for FY 1975 is requested to cover the annual cost of the October 1973 pay raise for civilian employees. The accompanying table shows the relationships among contract authority, the amount of programmed new budget authority (NBA), the amount of budget authority lapsing and the appropriation of liquidating cash.

RECAPITULATION OF PUBLIC LANDS DEVELOPMENT ROADS AND TRAILS STATUS OF NBA AND LIQUIDATING CASH APPROPRIATIONS

Fiscal Year	New Budget Authority Authorized by the Federal Aid Highway Acts (in $1,000's)	Budget Authority Lapsing (in $1,000's)	Programmed New Budget Authority (in $1,000's)	Liquidating Cash Appropriation (in $1,000's)	Unfunded Balance Lapsing (in $1,000's)
1963	2,000		-----	-----	
1964	4,000		2,000	760	
1965	2,000		2,500	2,500	
1966	2,000		2,000	2,000	
1967	3,000		2,000	2,000	
1968	5,000		3,000	2,600	
1969	3,500		3,320	3,500	
1970	5,000		4,000	3,500	
1971	5,000		2,500	3,500	
1972	10,000		4,000	3,200	
1973	-----		4,313	3,265	
1974	20,000		4,000	4,000	
1975	10,000	4,891	4,070	4,070	4,891
Total	71,500	4.891	37,703	34,895	4.891

Unprogrammed Contract Authorization at end of FY 1975 - $28,906 thousand.
Unfunded Contract Authorization at end of FY 1975 - $31,714 thousand.

Planned Use of Contract Authority - FY 1975. The Bureau obligation program will permit road grading of 41 miles, road surfacing of 141 miles, construction of one bridge and one mile of trail, and for the Bureau's sign program. The estimate also includes funds to accomplish survey and design and acquire easements for roads and trails.

An adequate road and trail system is essential to the public use and proper management and protection of 450 million acres of National Resource Lands administered by the Bureau. Most of the land is presently accessible only by primitive roads and many millions of additional acres are completely inaccessible because of lack of easements across surrounding private lands.

Most of the existing Bureau road system consists of primitive roads which do not adequately service the Bureau's resource and administrative needs. Furthermore, these roads often pose a serious safety hazard to the using public, many of whom are not properly equipped or familiar with local driving hazards. Expanded use of the lands for recreation and other purposes is aggravating public safety problems.

Of the 44 thousand miles of existing roads, 32 thousand are classed as primitive and approximately 30 thousand miles are in need of upgrading. These roads do not meet adequate standards and many can be used only seasonally. In addition, another 6,700 miles of added construction and surfacing has been identified to serve the long term management needs of the National Resource Lands. Of the estimated 19 thousand miles of trail requirements, only about 5 thousand miles presently exist.

Construction standards vary from single-lane graded dirt roads for fire control to double-lane surface roads to meet multiple resource needs and intensive recreation access.

A summary of the programmed authority for FY 1975 by State is as follows:

Arizona	$ 294,000
California	89,000
Colorado	112,000
Idaho	496,000
Montana	182,000
Nevada	95,000
New Mexico	235,000
Oregon	422,000
Utah	264,000
Wyoming	308,000
Survey & Design & Easement Acquisition (All States)	1,573,000
TOTAL OBLIGATION PROGRAM	$4,070,000

Public Lands Development Roads and Trails
Personnel Summary

	1973 Actual	1974 Est.	1975 Est.
Total number of permanent positions	75	75	75
Full-time equivalent of other positions	26	29	29
Average number of all employees	95	98	98
Average GS grade	9.0	9.0	9.0
Average GS salary	$13,866	$14,527	$14,527

ITEMIZATION OF ESTIMATE

Public Lands Development Roads and Trails

	Actual 1973	Actual 1974	Actual 1975	Increase + Decrease -
Program and Financing:				
Total obligations.....	$ 3,158,333	$ 5,155,000	$ 4,070,000	$- 1,085,000
Unobligated balance available start of year.....	-17,274,160	-14,115,827	-28,960,827	-14,845,000
Unobligated balance available end of year.....	14,115,827	28,960,827	30,000,000	+ 1,039,173
Unobligated balance lapsing.....	----	----	4,890,827	+ 4,890,827
Unfunded balance, start of year.....	17,940,000	14,675,000	30,675,000	+16,000,000
Unfunded balance, carried forward.....	-14,675,000	-30,675,000	-31,714,173	- 1,039,173
Unfunded balance, lapsing	----	----	- 4,890,827	- 4,890,827
Appropriation to liquidate contract authorization.....	$3,265,000	$4,000,000	$4,070,000	+$ 70,000
Obligations by Objects:				
11.0 Personnel compensation.....	$1,258,000	$1,270,000	$1,340,000	+ 70,000
12.1 Personnel benefits: Civilian employees	108,000	108,000	108,000	----
21.0 Travel and transportation of persons	105,000	145,000	150,000	+ 5,000
22.0 Transportation of things.....	60,000	86,000	86,000	----
23.0 Rent, communications, and utilities.....	13,000	18,000	20,000	+ 2,000
25.0 Other services.....	263,000	377,000	350,000	- 27,000
26.0 Supplies & Materials.	139,000	199,000	200,000	+ 1,000
31.0 Equipment.....	64,000	97,000	100,000	+ 3,000
32.0 Lands & Structures...	1,147,333	2,855,000	1,716,000	- 1,139,000
Total Direct Obligations..	3,158,333	5,155,000	4,070,000	- 1,085,000

Department of the Interior
Bureau of Land Management
Oregon and California Grant Lands

Estimated appropriation, 1974		$ 28,750,000
Unobligated balance from prior years (included in this unobligated balance, $305,088 for Forest Service)		5,242,697
Total available for obligation		33,992,697
Decreases		
Construction and acquisition (included in this amount is $3,445,313 for Forest Service)	$ 16,031,333	
Forest development, protection and management (includes $188,876 for Forest Service)	13,084,860	
Operation and maintenance	4,876,504	
		-33,992,697
Increases		
Construction and acquisition (included in this amount is $4,064,313 for Forest Service)	13,188,333	
Forest development, protection and management (includes $243,876 for Forest Service)	15,952,860	
Operation and maintenance	4,851,504	
Total available for obligation		33,992,697
Less: Unobligated balance from prior years		5,242,697
Budget Estimate, 1975		28,750,000

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Oregon and California Grant Lands
Analysis by Activities

	Fiscal Year 1975				
	Amount Available 1974	Estimated Total Available	Unobligated Balance from prior year	Budget Estimate	Total Available 1975 Compared to Total Available 1974
1. Construction & acquisition	$16,031,333	$13,188,333	$-1,688,333	$11,500,000	- $2,843,000
2. Forest development, protection & management	13,084,860	15,952,860	-2,752,860	13,200,000	+ 2,868,000
3. Operation & maintenance	4,876,504	4,851,504	- 801,504	4,050,000	- 25,000
Total	33,992,697	33,992,697	-5,242,697	28,750,000	---

JUSTIFICATION

Appropriation Title

Oregon and California Grant Lands - $28,750,000

Under this title an amount equal to 25% of the gross receipts from sales of timber and other products on the revested Oregon and California Railroad Grant Lands is appropriated for the construction, acquisition, operation and maintenance of access roads and other improvements, and for forest management, reforestation, and protection of the BLM administered lands in western Oregon.

The estimate for FY 1975 for this appropriation is $28,750,000, no change from 1974 exclusive of carryover funds.

1. Construction and Acquisition - $11,500,000

The FY 1975 estimate of $11,500,000 is a decrease of $3,300,947 below FY 1974 exclusive of carryover funds. This activity provides for the construction of access roads and recreation facilities in western Oregon.

The analysis of new budget authority, total availability, and the obligation program follows in tabular form on the following page.

1. Construction and Acquisition Activity, Analysis by Subactivity and Agency

Agency	Amount Available FY 1974	Fiscal Year 1975 Estimated Total Available	Fiscal Year 1975 Unobligated Balance From FY 1974	Fiscal Year 1975 Budget Estimate	Total Available 1975 Compared to 1974	Fiscal Year 1975 Obligation Program FY 1975
(a) Access roads:						
1. Bureau of Land Management	$10,546,020	$ 8,472,020	$ 497,020	$ 7,975,000	$-2,074,000	$ 8,225,000
2. Forest Service	2,650,000	3,175,000	350,000	2,825,000	+ 525,000	2,075,000
Subtotal, Access roads	13,196,020	11,647,020	847,020	10,800,000	-1,549,000	10,300,000
(b) Recreation facilities						
1. Bureau of Land Management	2,040,000	652,000	652,000	-0-	-1,388,000	500,000
2. Forest Service	795,313	889,313	189,313	700,000	+ 94,000	700,000
Subtotal, Rec. facilities	2,835,313	1,541,313	841,313	700,000	-1,294,000	1,200,000
Activity total	16,031,333	13,188,333	1,688,333	11,500,000	-2,843,000	11,500,000

(a) Access Roads-$10,800,000

The amount of $10,800,000 includes $2,825,000 for the Forest Service. The BLM amount of $7,975,000 is a decrease of $2,107,000 compared to the amount available for 1974 exclusive of carryover funds. These funds will be used for survey and design, rights-of-way agreements, and acquisition of easements as well as construction, improvement, and acquisition of roads and bridges in support of the management of the O&C revested lands in western Oregon.

The access road system must be planned sufficiently ahead of actual sales to provide access to undeveloped areas of mature, over-mature, decadent, and scattered salvage timber stands to insure a well-balanced schedule of timber harvest. Access affords bidding opportunities to all prospective timber buyers.

During FY 1975, a BLM obligation program of $8,225,000 including $250,000 in carryover funds is planned to accomplish 31 miles of surfacing and 34 miles of grading. Rock production for road repair and surfacing and construction of bridges and culverts is also included.

The Forest Service road construction estimated new authority of $2,825,000 is an increase of $272,000 over FY 1974, exclusive of carryover funds. The Forest Service planned obligation program for FY 1975 is $2,075,000.

(b) Recreation Construction - $700,000

The BLM portion of this program will be carried out with $500,000 in carrover funds. The Forest Service recreation construction amount is $700,000, an increase of $94,000 over FY 1974 exclusive of carryover funds.

Access roads have opened many previously remote areas with high recreation value. Increasing use of these areas by the public creates fire and pollution hazards which endanger both the resources and the using public. The recreation construction program attempts to minimize or eliminate these hazards by providing potable water and sanitary picnic and camping facilities in carefully selected areas.

The BLM FY 1975 program will provide for environmental studies, survey and design, recreation inventory, coordination and advance planning for future recreation demands in Western Oregon. No facility construction is planned in FY 1975.

Details of the construction and acquisition program are shown in the following tables:

OREGON AND CALIFORNIA GRANT LANDS
Fiscal Year 1974 Program
Construction and Acquisition

Availability:

Unobligated balance as of 6/30/73, brought forward..... (included in this unobligated balance is $286,212 for Forest Service)	$ 1,230,386
Estimated warranted authorization, FY 1974.....	14,800,947
Less: Unobligated balance, end of year FY 1974.....	-1,688,333
Available for 1974 program.....	14,343,000

Utilization:

Bureau of Land Management:		
Planning, reconnaissance.....	$ 400,000	
Acquisition.....	300,000	
Recreation construction.....	1,388,000	
		2,088,000
Federal Highway Administration:		
Surveys.....	200,000	
Road construction.....	9,149,000	
		9,349,000
Forest Service:		
Construction of roads.....	2,300,000	
Recreation construction.....	606,000	
		2,906,000
		14,343,000

Detail of Road Construction Program, BLM Lands, FY 1974

Road System	Project Name	Miles	Type	Cost Estimate
Galice	Galice Creek	12	Grading	$ 3,500,000
Columbia	Seaporia	11	Grading	140,000
Blue Ridge	Blue Ridge	19	Surfacing	325,000
Glendale	Cow Creek Slide	-	Correct slide condition	80,000
Rock Creek	Berry Creek	7	Surfacing	350,000
Elk Head	Wards Butte	6	Grading	114,000
Lake Creek	Deadwood	6	Grading	300,000
Upper Rogue	W. Branch Elk Creek	.6	Grading & Surfacing	160,000
Molalla	Middle Fork Road	12	Surfacing	250,000
Glendale	Bobby Creek	4.5	Surfacing	300,000
Bridges and culverts.....				730,000
Aggregate production.....				2,000,000
Survey and design.....				200,000
Construction Engineering & Contract Modification.....				900,000
Subtotal (FHWA).....				9,349,000
Planning and reconnaissance (BLM).....				400,000
Road and Easement acquisition (BLM).....				300,000
Total FY 1974 Obligation Program.....				10,049,000

Detail of Recreation Construction Program, BLM Lands, FY 1974

Project	County	Cost Estimate	Family Units	1/ OTU's
Shotgun	Lane	$ 674,000	57	285
Pollution Control	All O&C Counties	145,000	Modification of Water Systems	
Rock Creek	Douglas	25,000	Stream Bank Stabilization	
Rogue River Trail Bridges	Josephine	4,000	Contract Supervision	
Swiftwater	Douglas	237,000	75	450
Total		$ 1,085,000	132	735

In addition to the funds identified above, the remaining sum of $303,000 is for survey and design, recreation inventory and analysis, coordination and planning for future recreational demands in Western Oregon.

1/ OTU's represent "one-time-use" capacity or the average number of people which the proposed facility could accommodate at any given moment. It applies only to construction features, which by their nature, increase capacity.

OREGON AND CALIFORNIA GRANT LANDS
Fiscal Year 1975 Program
Construction and Acquisition

Availability:		
Unobligated balance as of 6/30/74, brought forward..... (included in this unobligated balance is $539,313 for Forest Service)		1,688,333
Estimated warranted authorization, FY 1975.....		11,500,000
Less: Unobligated balance, end of year FY 1975.....		1,688,333
Available for FY 1975 program.....		11,500,000
Utilization:		
Bureau of Land Management:		
GSA Space Costs.....	$ 90,000	
Planning, reconnaissance.....	410,000	
Acquisition.....	300,000	
Recreation construction.....	500,000	
		1,300,000
Federal Highway Administration:		
Surveys.....	200,000	
Road Construction.....	7,225,000	
		7,425,000
Forest Service:		
Construction of roads.....	2,075,000	
Recreation construction.....	700,000	
		2,775,000
Total 1975 program.....		11,500,000

Detail of Road Construction Programs, BLM Lands, FY 1975

Road System	Project Name	Miles	Type	Cost Estimate
Galice	Galice Creek	12	Surfacing	$ 1,625,000
Columbia	Scaponia	11	Surfacing	325,000
Rock Creek	Bob Butte	8	Grading & Surfacing	1,300,000
McKinzie	McKinzie-Bear	5	Grading	300,000
Mohawk	Shotgun Creek	1	Grading	75,000
Rock Creek	Berry Creek Spurs	8	Grading	350,000
Bridges and culverts				725,000
Aggregate production				1,525,000
Survey and design				200,000
Construction Engineering & Contract Modification				1,000,000
Subtotal (FHWA)				7,425,000
Planning and reconnaissance (BLM)				410,000
Road and easement acquisition (BLM)				300,000
GSA Space				90,000
Total FY 1975 Obligation Program				8,225,000

2. Forest Development, Protection and Management - Analysis by Subactivity and Agency

Subactivity and Agency	Amount Available FY 1974	Estimated Total Available	Unobligated Balance From FY 1974	Budget Estimate	Total Available 1975 Compared to 1974	Obligation Program FY 1975
(a) Forest protection: Bureau of Land Management	$1,361,549	$ 1,521,548	- $ 221,549	$ 1,300,000	+ $ 159,999	1,300,000
(b) Forest Development:						
Bureau of Land Management	4,900,000	5,100,000	- 1,000,000	4,100,000	+ 200,000	4,100,000
Forest Service	188,876	243,877	- 18,876	225,000	+ 55,001	225,000
(c) Forest Management: Bureau of Land Management	6,634,435	9,087,435	- 1,512,435	7,575,000	+ 2,453,000	7,575,000
Total	13,084,860	15,952,860	- 2,752,860	13,200,000	+ 2,868,000	13,200,000

3. Operation and maintenance (ALL BLM) - Analysis by Subactivity

(a) Roads	3,725,000	3,700,000	400,000	3,300,000	-25,000	3,300,000
(b) Recreation facilities	1,151,504	1,151,504	401,504	750,000	--	750,000
Total	4,876,504	4,851,504	801,504	4,050,000	-25,000	4,050,000

(2) Forest Development, Protection and Management $13,200,000

The FY 1975 estimate of $13,200,000 is an increase of $3,550,559 over FY 1974 exclusive of carryover funds. The program provides for the protection of western Oregon forests, reforestation, and rehabilitation practices, timber stand improvement and a variety of forest management functions oriented toward the orderly harvest of timber crops.

(a) Forest Protection - $1,300,000

The estimate of $1,300,000 is an increase of $819,011 over FY 1974 exclusive of carryover funds. On an obligation program basis the increase is $160,000. BLM contracts for fire protection on approximately 2.4 million acres of O&C and public domain forest lands in western Oregon. These contracts are negotiated with the State of Oregon, the Forest Service, and Clackamas County on a rate per acre which reflects each agency's costs for fire suppression and fire prevention in past years. The Bureau will also continue to contribute to presuppression and control measures through the removal of snags, slash disposal, firebreak construction, fire law enforcement and fire investigations on Bureau administered lands. The obligation program increase is attributable to higher actual fire costs in 1973 which will be reflected in FY 1975 protection contracts.

(b) Forest Development - $4,325,000

The estimate of $4,325,000 represents an increase of $215,000 over the FY 1974 amount, exclusive of carryover funds.

Bureau of Land Management - $4,100,000

The purpose of this program is to insure maximum timber production which is reflected in the level of the annual allowable cut. This is accomplished in part by pre-commercial thinning which involves the removal of trees from immature, overstocked stands of timber. This practice gives the residual trees more room for growth and development and will produce commercial sized timber in a shorter period of time with more useable wood volume than would otherwise be realized.

Site and stand improvement, stand conversion, reforestation, and genetic improvement are also part of this program. These practices are all conducive to bringing denuded forest lands with little or no natural regeneration and unproductive hardwood stands into full timber production. Site treatment involves the removal of brush and other obstacles from potential timber producing sites to permit planting of desirable tree species. Genetic improvement of commerical tree species helps provide superior seed and planting stock. These practices together with commerical thinning and mortality salvage operations make up the Bureau's western Oregon intensified forest management program. Through study and analysis, each practice has been found to be both environmentally and economically feasible. The best possible combination or mix of practices is determined through computerization which also permits allowable cut projections far into the future based on varying levels of intensity and mix of development practices.

Forest Service - $225,000

The Forest Service program of $225,000 is an increase of $55,000 over FY 1974 and is included in the forest development total. This provides for reforestation and stand improvement work on those O&C lands which are under Forest Service jurisdiction.

(c) Forest Management - $7,575,000

The estimate of $7,575,000 is an increase of $2,476,548 over the amount available in FY 1974, exclusive of carryover funds. The increase is necessary to maintain a level forestry program in a situation of rising management costs such as pay raises enacted for prior years and GSA Space Costs ($635,000). Also the increase is necessary to offset a reduction of $1,425,000 in the amount of Management of Lands and Resources appropriation funds utilized for Western Oregon Forest Management. This funding adjustment permits an increase of an equivalent amount for forest management programs on other than Western Oregon lands as discussed under Management of Lands and Resources.

The total Western Oregon management program including the Management of Lands and Resources Appropriation funds, provides for the layout, measurement, appraisal, sale and administration of the total allowable cut in Western Oregon. This cut is determined from periodic inventories which are correlated with the principles of multiple-use and environmental protection and enhancement to develop a sustained yield timber harvest.

3. Operation and Maintenance $4,050,000

The amount of $4,050,000 is a decrease of $249,612 over the amount available for FY 1974, exclusive of carryover funds. This program provides adequate maintenance of access roads and recreation facilities on Bureau lands in western Oregon.

(a) Roads - $3,300,000

The amount of $3,300,000 is a decrease of $48,107 over FY 1974 availability, exclusive of carryover funds.

These funds provide maintenance for approximately 7,500 miles of timber access roads. These roads must be kept in usable condition to insure an even flow of logs to the mills, particularly during the rainy season when inadequately maintained roads rapidly deteriorate. Washouts are costly both in repairs and in the economic loss suffered by the mill operator and the logger.

Use of the O&C road system continues to increase each year. Much of this road system is in poor condition and poses serious safety problems because the roads are increasingly used by visitors who are unfamiliar with local conditions. Also, inadequately maintained roads have an environmental impact far beyond the immediate land they occupy. Erosion, caused by poor drainage or improper grades, can influence water quality for many miles downstream. Poorly maintained roads also result in heavy rutting, land slides and other degradations

of outdoor surroundings. The road maintenance program includes preventative and corrective maintenance to alleviate the above problems, reducing the long-run costs of protecting the investment in roads and resulting in more efficient land and resource management through improved access.

The estimated requirement for GSA Space included in this subactivity in FY 1975 is $42.000.

(b) Recreation Facilities - $750,000

The esitmate of $750,000 is a decrease of $201,505 over the amount available in FY 1974, exclusive carryover funds. The obligation program is $750,000 for both years. The O&C areas are near population centers and are receiving more recreation use every year. Visitor days at western Oregon recreational facilities are increasing every year and the trend is expected to continue throughout the 1970's. This increasing demand comes largely from metropolitan areas of California and other surrounding states as well as additional pressure from in-state residents.

Heavy use increases the maintenance effort. This program provides adequate services such as disposing of garbage, servicing sanitation facilities, keeping drinking water safe, and repairing and maintaining facilities on 53 developed sites in western Oregon.

Personnel Summary

Bureau of Land Management	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions	410	410	453
Full-time equivalent of other positions	79	80	80
Average number of all employees	480	481	521
Average GS grade	9.0	9.0	9.0
Average GS salary	$13,866	$14,527	$14,527

Allocation Accounts	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions	79	109	115
Full-time equivalent of other positions	22	24	27
Average number of all employees	190	132	141
Average GS grade	8.3	8.3	8.3
Average GS salary	$13,823	$14,661	$14,983
Average salary of ungraded positions	$10,173	$10,640	$10,640

ITEMIZATION OF ESTIMATE

Oregon and California Grand Land (receipt limitation)

	Actual 1973	Actual 1974	Estimate 1975	Increase (+) Decrease (-)
Program and Financing:				
Total obligations	$18,045,000	$28,750,000	$28,750,000	---
Unobligated balance available, start of year...	-964,000	-5,243,000	-5,243,000	---
Unobligated balance available, end of year.....	5,243,000	5,243,000	5,243,000	---
Appropriation.....	22,324,000	28,750,000	28,750,000	---
Obligations by Objects:				
11.0 Personnel compensation....	6,930,000	7,389,000	8,158,000	+ 769,000
12.1 Personnel benefits: Civilian employees.....	594,000	637,000	693,000	+ 56,000
21.0 Travel and transportation of persons.....	269,000	393,000	489,000	+ 96,000
22.0 Transportation of things.....	518,000	652,000	757,000	+ 105,000
23.0 Rent, communications, and utilities.....	101,000	176,000	244,000	+ 68,000
24.0 Printing and reproduction..	6,000	6,000	12,000	+ 6,000
25.0 Other services.	3,043,000	5,468,000	5,675,000	+ 207,000
26.0 Supplies and materials.....	678,000	754,000	834,000	+ 80,000
31.0 Equipment.....	180,000	226,000	301,000	+ 75,000
32.0 Land and structures.....	5,728,000	13,052,000	11,593,000	-1,459,000
Subtotal.....	18,047,000	28,753,000	28,756,000	+ 3,000
95.0 Quarters and subsistence charges.....	-2,000	-3,000	-6,000	- 3,000
Total obligations....	18,045,000	28,750,000	28,750,000	---

RANGE IMPROVEMENTS

Fiscal Year 1975

Amount Available 1974	Available	Unobligated Balance from Prior Year	Budget Estimate	Total available, 1975 compared to total available, 1974
$3,242,000	$4,503,000	-----	$4,503,000	$+1,261,000

Range Improvements, an annual, indefinite appropriation, is derived from the Range Improvement Fund established by Law (43 U.S.C. 315). Included also are receipts from Bankhead-Jones Farm Tenant Act lands transferred from the Department of Agriculture by various Executive Orders. The increase for 1975 results from the increase of $0.22 per animal unit month in grazing fees for the grazing year beginning on March 1, 1974, a portion of which is designated in the Act as the Range Improvement Fee. This will bring the total fee to $1.00 per animal unit month. One half of the 1974 increase has been designated for the Range Improvement Fund in the case of fees derived from within grazing districts where the Secretary has discretionary authority to designate distribution of the fee.

The objectives of this program are to support intensive range management on deteriorated and declining range lands, to restore and sustain forage production, and to complement the watershed treatment and wildlife habitat improvement programs. Lands valuable for forage production are usually also valuable upland watersheds and important wildlife winter ranges or habitat areas.

Program of Continuing Work:

In FY 1975, the estimated work include construction of 50 miles of fence, 600 water developments and continued maintenance of existing range improvements. These added improvements will aid implementation of multiple-use management plans on lands which are important for forage production, watersheds, and wildlife habitat. Land improvements resulting from these efforts will provide additional forage for livestock and wildlife.

Personnel Summary

	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions positions	44	44	44
Full-time equivalent of other positions	36	60	60
Average number of all employees	76	101	101
Average GS Grade	9.0	9.0	9.0
Average GS salary	$13,866	$14,527	$14,527

ITEMIZATION OF ESTIMATE

Range Improvement (receipt limitation)

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) Decrease (-)
Program & Financing:				
Total obligations	$2,624,760	$3,463,127	$4,503,000	+$1,039,873
Unobligated balance available, start of year	- 132,119	- 221,018	-----	+ 221,018
Unobligated balance available, end of year	221,018	-----	-----	-----
Appropriation	2,713,659	3,242,109	4,503,000	+1,260,891
Obligations by Objects:				
11.0 Personnel compensation	$ 873,000	$1,155,000	$1,155,000	-----
12.0 Personnel benefits: Civilian Empl	74,000	100,000	110,000	+ 10,000
21.0 Travel & Transportation of persons	48,000	70,000	70,000	-----
22.0 Transportation of things	128,000	175,000	225,000	+ 50,000
23.0 Rent, communications and utilities	6,000	10,000	10,000	-----
24.0 Printing and reproduction	4,000	5,000	5,000	-----
25.0 Other services	27,000	30,000	40,000	+ 10,000
26.0 Supplies and materials	630,760	825,127	1,000,000	+ 175,000
31.0 Equipment	30,000	35,000	45,000	+ 10,000
32.0 Lands and Structures	804,000	1,058,000	1,843,000	+ 785,000
Total Obligations	2,624,760	3,463,127	4,503,000	+1,040,000

RECREATION DEVELOPMENT AND OPERATION OF RECREATION FACILITIES

Fiscal Year 1975				
Amount Available 1974	Estimated Total Available	Unobligated Balance from Prior Years	Budget Estimate	Total available 1975 compared to Total available 1974
$165,000	$242,000	---	$242,000	+$77,000

The Recreation Development and Operation of Recreation Facilities, appropriation is derived from recreation user fees collected pursuant to the Land and Water Conservation Fund of 1965, as amended. Funds from this source are utilized to operate, maintain and improve re-recreation facilities on the public land. The overall goal of the Bureau's recreation program is to meet rapidly increasing public demands for safe recreation experiences while protecting the lands and related resources. The increase for 1975 is attributable to increased receipts from permits for organized events such as off-road vehicle rallies.

The planned program for FY 1975 complements recreation maintenance financed in the Construction and Maintenance and Oregon and California Grant Lands Appropriation and contributes to the off-road vehicle management program. Funds will be used to perform corrective and preventative maintenance at recreation facilities and to construct and improve facilities in support of the BLM off-road vehicle management program.

Personnel Summary

	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions	---	---	---
Full-time equivalent of other positions	---	6	10
Average number of all employees	---	6	10
Average GS grade	---	9.0	9.0
Average GS salary	---	$14,527	$14,527

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Itemization of Estimate
Recreation Development and Operation of Recreation Facilities
(Receipt Limitation)

	1973 Actual	1974 Estimate	1975 Estimate	Increase (+) Decrease (-)
Program and Financing:				
Total obligations....	---	$165,000	$242,000	+ 77,000
Appropriation.....	---	165,000	242,000	+ 77,000
Obligations by Objects:				
11.0 Personnel compensation...	---	60,000	100,000	+ 40,000
12.0 Personnel benefits: Civilian employees	---	8,000	10,000	+ 2,000
21 Travel and Transportation of persons.....	---	8,000	10,000	+ 2,000
23 Rent, communication & Utilities	---	4,000	5,000	+ 1,000
25 Other services..	---	60,000	87,000	+ 27,000
26 Supplies & materials	---	20,000	25,000	+ 5,000
31 Equipment.....	---	5,000	5,000	-----
Total Obligations.....	---	165,000	242,000	+ 77,000

Administrative Provisions

Authorization is requested to purchase two aircraft for use in Alaska or to acquire such aircraft by transfer from another agency's surplus if suitable aircraft becomes available. Subsequent to acquisition by BLM, these aircraft will be under the jurisdiction of the Office of Aircraft Services, Office of the Secretary and available for use in Alaska by BLM and all other Interior agencies.

Cessna 210. The proposed acquisition will replace a ten year old Cessna 180. The Cessna 210 will be used for activities which presently require the use of a twin-engined Aero Commander or leased aircraft with higher operating costs. The 210 will serve as the lead or guide plane for BLM's firefighting retardant bombing operations.

Aero Commander. This airplane would replace an eight year old Aero Commander which is a light twin-engine aircraft seating six or seven. Substantial savings in maintenance costs can be realized by acquiring a new plane. The Aero Commander will be primarily used for employee transport requirements associated with the Native Claims program and Alaska pipeline inspection.

Replacement aircraft to be acquired:

Number	2
Cost	$265,000

DEPARTMENT OF THE INTERIOR

OFFICE OF WATER RESOURCES RESEARCH

SALARIES AND EXPENSES

Highlight Statement

The total budget request for the Office of Water Resources Research (OWRR) is $12,700,000, a decrease of $989,000 from the 1974 appropriation for the program, and $529,000 below the amount requested for FY 1974. The request includes: (1) $4,539,000 for annual grants to State Water Resources Research Institutes under Section 100, Title I, of the Water Resources Research Act, a decrease of $1,101,000 from the FY 1974 appropriation and $561,000 from the 1974 request; (2) $3.0 million for matching grants to State institutes for specific research projects under Section 101, Title I, of the Act, the same amount as was requested and appropriated the preceding year; (3) $3,170,000 for additional water research to be conducted by qualified organizations and individuals pursuant to Title II of the Act, an amount identical to that requested and appropriated in FY 1974; (4) $940,000 for operation of a center for acquisition, storage, retrieval and dissemination of scientific water resources data, which amount is $6,000 more than for FY 1974; and (5) $1,051,000 for program management and administration, an increase of $26,000 over the amount available for FY 1974.

General

As elaborated upon in OWRR's 1973 Annual Report and in the statements that follow, significant progress has been made toward achieving the research, training and scientific information dissemination objectives of the Water Resources Research Act of 1964. The past year has seen the development and initial implementation of new program orientation directed toward achieving more cost-effective problem-oriented research results. Under this program specific emphasis is and will continue to be placed upon research seeking answers to the most urgent water-related problems. The State institute directors have been working together through regional associations to identify the important water and water related problems and the corresponding research priorities. Where desirable, they have jointly undertaken research in an effort to bring the best minds to bear on problems of a local, multi-state, or national nature.

Title I and II

Under the Title I research, scientific information dissemination, and training program the State water resources research institutes located at a state university in each of the 50 states and in Puerto Rico have developed research programs related to such diversified water problem areas as: water supply augmentation and conservation; improved water resource planning techniques and management practices; and environmental protection and enhancement, including water quality management. The results of many recently completed projects are being used by Federal, state and municipal agencies to assist in the solution of their respective water problems or to serve as a foundation for additional research studies directed toward more effective solutions to these problems. The increased exchange of ideas and general consultation and collaboration between the Institutes and other members of the Federal, state, and local water resource communities, as required by the 1971 amendment of the Water Resources Research Act, has resulted in greater relevance of the research programs as well as improved dissemination and application of results. Expansion of this cooperative effort toward the identification and solution of common problems of a regional or river basin nature offers promise of an even more effective program.

The Title II research program permits the Department to augment the capabilities available through the Title I program by making it possible to draw upon the specialized expertise offered by a broad spectrum of scientific and engineering organizations and individuals from within both the public and private domains. This reservoir of specialized competence is being used to solve urgent water problems related to the missions of the Department of the Interior and its bureaus and offices. Title II funds will be used to support eight research programs in support of five identified current priority objectives of the Department of the Interior in energy, land use management, water resources, environmental preservation and Indian self-determination, supplemented by three OWRR programs representing special attention being given to water reuse, to irrigation efficiency, and to urban water problems as assigned by the Committee on Water Resources Research of the Federal Council for Science and Technology.

Non-Federal Contributions

Since the start of the Section 101 matching grant program in 1965, the State institutes have committted more in non-Federal funds than that required to match the Federal input. There is every indication that the states are prepared to continue to provide cooperative support funds in excess of those required by the Act.

Similarly, although not required to do so, the states are making significant contributions to the Section 100 annual allotment program with such contributions expected to exceed $5 million for fiscal year 1974. This is virtually a dollar for dollar matching contribution by the states as a whole.

Training

The training provisions of the Act are being successfully implemented through the participation of productive and innovative graduate and undergraduate students as research assistants on the various Title I projects. Some 2,000 such research assistants participated in the FY 1974 program, many of whom plan to continue in water research work upon completion of their education. This training program has resulted in a constant flow of trained and dedicated personnel to meet the continuing demands for trained water resource personnel in governmental agencies at all levels as well as in the universities and private industry.

Dissemination of Scientific Information

OWRR's Water Resources Scientific Information Center continues to successfully meet the needs of the Nation's water resources community for scientific and technical information and to expand its coverage of the water resources field. WRSIC's machine-readable information base now contains over 70,000 citations and abstracts and is expected to increase by some 16,000 items in the coming year. Its principal products, a twice-monthly journal containing abstracts of research results, an annual catalog describing on-going research, and topical bibliographies, are widely distributed and have been a major factor in improving communications and coordinating the efforts of those engaged in Federally-sponsored water programs. This timely dissemination of information about water resource research activities and results has significantly reduced undesirable replicative research and has provided the basic information on which many current advanced research projects are based. A limited test network of field retrieval stations to provide prompt responses to specific water research inquiries is now in operation, and the feasibility of its expansion to more expeditiously serve the needs of the water planners, managers, researchers, and others is being studied. Members of the Federal water resources community, including members of Congress and their staff assistants, are invited to use the WRSIC retrieval system to obtain information about recently completed research.

The State institutes, responding to the December 1971 amendments to the Water Resources Research Act, have placed increased emphasis on the dissemination of research information. This has been greatly facilitated by the consultation and collaboration activities of the institutes undertaken for program development and research identification purposes. Research information dissemination by the institutes includes such activities as giving technical lectures and popular talks, conducting seminars, publishing newsletters, writing popular research description articles for papers and journals, and providing consultation and advisory services to state, local and other water officials.

Other Activities

The Office of Water Resources Research continues to place increasing emphasis on achieving closer consultation and collaboration between the State water resources research institutes and other members of the water resources community in all phases of problem identification and analysis, research program development and execution, and application of research results. Currently this coordinated effort is being expanded to encompass interstate collaboration on water research matters. State institute groups, State institute directors and State water officials have met on a regional basis and identified key water problem areas and defined priority research needs which will, in many cases, be jointly undertaken. The result should be a more efficient and cost-effective program with a minimum of duplication and with the best talents of several State institutes contributing to the solution of well defined water resource problems of mutual concern.

OFFICE OF WATER RESOURCES RESEARCH

Salaries and Expenses

Appropriation, 1973	$16,344,000
Transferred to other accounts	-2,040,000
Total available, 1973	$14,304,000
Appropriation, 1974	$13,689,000
Transferred to other accounts	- 460,000
Total available, 1974	$13,229,000

Summary of Increases and Decreases, 1975

	Base for 1975	Increase/Decrease 1975	
Assistance to States for Institutes:			
Reduces Annual Grants to State Institutes	$5,100,000	$-561,000	
Scientific Information Center:			
Increases to cover pay raises	934,000	+ 6,000	
Administration:			
Increases to cover portion of space rental costs	1,025,000	+ 26,000	
Net Decrease, 1975			-529,000
Budget estimate, 1975			12,700,000

SALARIES AND EXPENSES

Analysis by Activities

Activity	Fiscal Year 1973 Amount Available	Fiscal Year 1974 Total Appropriation	Fiscal Year 1974 Transfers	Fiscal Year 1974 Amount Available
1. Assistance to States for institutes.....	$ 5,100,000	$ 5,640,000	$ -540,000	$ 5,100,000
2. Matching grants to institutes.....	3,000,000	3,000,000	--	3,000,000
3. Additional water research.....	4,300,000	3,170,000	--	3,170,000
4. Scientific information center.....	913,761	934,000	--	934,000
5. Administration.....	965,850	945,000	80,000	1,025,000
Unobligated balance lapsing.....	24,389	--	--	--
Total.....	$14,304,000	$13,689,000	$ -460,000	$13,229,000

Analysis by Activity

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 compared with 1974
1. Assistance to States for institutes.....	$ 5,100,000	$ 5,100,000	$ 4,539,000	$ -561,000
2. Matching grants to institutes.....	3,000,000	3,000,000	3,000,000	--
3. Additional water research.....	4,300,000	3,170,000	3,170,000	--
4. Scientific information center.....	913,761	934,000	940,000	+ 6,000
5. Administration.....	965,850	1,025,000	1,051,000	+ 26,000
Unobligated balance lapsing.....	24,389	--	--	--
Total.....	$14,304,000	$13,229,000	$12,700,000	$ -529,000

Justification

The purpose of water resources research is to develop by careful study and investigation the facts and principles needed to make effective and improved water resource planning and decision-making possible. Every part of the Nation faces current or potential water problems which vary greatly in nature and often involve conflicting needs. It is not unusual for the solution to a problem in one area to aggravate or create an even greater problem in another. Research must, therefore, examine the cause and effect from the standpoint of the system as a whole if lasting and equitable benefits are to be realized. The current energy shortage poses an excellent example of the need for a systems approach to research. Many persons probably do not recognize the importance of water resources when they think of the energy crisis. Yet, water, its availability, conservation and quality, frequently will prove to be the key factor in determining the success or failure of many of the alternatives being considered as potential solutions to our energy problems.

The cooperative Federal/State program authorized by the Water Resources Research Act is singularly well suited to fill water and water-related research needs wherever they exist or develop. The program provides: experience; availability of a reservoir of highly competent research personnel; ready access to a comprehensive water resources research data base; and an established network of research institutes especially aware of the water resource needs and assets peculiar to the various States and regions.

Continuing a new program orientation initiated last year, the 1975 program will continue to emphasize problem definition and the coordinated and cooperative research effort by groups of State Institutes to solve common water resource problems of an interstate nature. The advice and needs of the various bureaus of the Department of the Interior, as well as all agencies of the Federal Government having water or water-related interest, will continue to be given full consideration in the establishment of priority problem areas and the selection of specific research projects for funding. The program will continue to expand the water resources data base maintained by OWRR's Water Resources Scientific Information Center (WRSIC) and to take other actions to assure that pertinent water resource research information is promptly made available to all Federal agencies and to the water resources community as a whole.

Now entering its tenth year, the Water Resources Research Program has reached a state of maturity where the pay-offs of early research efforts are evident. The results of many of the earlier research projects have been put to direct use by planners and managers of water resource activities. Many early projects, while not an end in themselves, have provided the basic information and encouragement on which more complex and comprehensive research efforts have been founded. Others have had the catalytic effect of providing that small, but essential, answer which generated information needed to proceed with problem-solving studies. The program has also continued to attract many students to the water field. About 2,000 students each year are employed as research assistants under the guidance of professional research investigators on sponsored research projects. As was anticipated by the Act, many of the student assistants of earlier years are now employed in water resource planning, management, and research activities after graduation. Annual reports of the Office of Water Resources Research reflect the varied scientific disciplines of these students and the types of water-related positions many accepted upon graduation.

OWRR's annual reports also cite numerous examples of research results and their application. A few examples also are summarized in the following justification statements for the annual allotment, matching grant, and additional water research (Title II) programs.

Building on this foundation of established research competence and drawing upon the available pool of highly experienced water research personnel, a continuing capability exists to develop solutions to existing water problems, and extend that capability to meet new and urgent water research requirements.

1. Assistance to States for Institutes

Analysis by Activity

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 compared with 1974
Assistance to States for institutes.....	$5,100,000	$5,100,000	$4,539,000	$ -561,000

Assistance to States for institutes. Fiscal year 1974, $5,100,000; fiscal year 1975, $4,539,000; decrease $561,000. The decrease consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$-561,000	--	$4,539,000	--	Provides for $89,000 for each State and Puerto Rico

This $4,539 million "Assistance to States for institutes" program activity, authorized by Section 100 of the Water Resources Act, will provide $89,000 to each State and Puerto Rico to support the work of the 51 State water resources research institutes in the 50 States and Puerto Rico. The three new institutes authorized to be established by P.L. 92-175 will remain unfunded. It is estimated that the 51 institutes and other cooperating universities will conduct approximately 400 projects in FY 1975 of which 200 will be carry-overs from the current fiscal year, and provide on-the-job water research training for some 1,800 students serving as research assistants on OWRR-sponsored projects.

Prior to their initiation, all research projects under this program element are subjected to an in-depth screening by Project Selection or Advisory Committees at the State level and by the State institute director offices prior to their final review and approval for support by the Office of Water Resources Research.

Although there are no statutory provisions which require non-Federal financial support for this activity, the States have contributed substantial sums since the beginning of the program. It is expected that close to 50% of the cost of the research and related activities carried out under the FY 1975 annual allotment program will be covered by non-Federal cost-support contributions by the State institutes.

In addition, it is expected that in 1975 the State institutes will:

* continue to improve the responsiveness and relevancy of their research effort by closely collaborating with the leading water officials within their respective states and regions on all phases of their program from problem definition through research execution and the dissemination of the research findings.

* coordinate closely with institutes in neighboring states on the development of joint research efforts to find solutions to common water problems.

* place additional emphasis on the prompt dissemination of water research results to those individuals and organizations who have a need for and ability to utilize such information.

In recent years there has been a steady trend toward the multidisciplinary approach to water resource research. The State university institutes and the more than 50 other participating universities and colleges can draw from a large, highly skilled cadre of scientific and academic disciplines to provide new and innovative approaches to research problems. The OWRR annual reports contain summaries of many useful research results stemming from the Section 100 annual allotment program. A few recent examples are cited below:

(1) An Arizona project investigated the feasibility of using the high temperatures developed at electric power sites to improve the efficiency of the renovation of waste water which could then be reinjected into the natural water reserve. Since electric power generation and waste water production are population dependent, they can be suitably coupled in an efficient system. The study concluded that the concept is feasible and that the use of the waste heat normally available at electrical power generating sites can result in the production of renovated water suitable for ground-water recharge and for agricultural purposes. In effect, this would result in a new water source.

(2) A small project in Idaho demonstrated the feasibility of using ozone to treat liquid waste, and water supplies plagued with high iron and manganese content. The project included research necessary for the development of a portable ozonation facility for such use. The W. R. Grace Company has subsequently provided the University of Idaho with pilot-type equipment to continue studies that will result in design information useful for adapting the technique for use in small city treatment plants and in processing of wastes generated by breweries, paper plants, and similar industries.

(3) A computer program has been developed by a University of Kentucky project which simulates flood plain damages which can be expected from various outflows from reservoirs in existence in a river system. Data provided by the program is currently being used by the Huntington District of the Corps of Engineers to determine the release schedule for the complex system of fifteen reservoirs in the Muskingham River Basin. The program will also be used to estimate the annual damage which may be expected along the Carmel River in California.

(4) The ability of poultry processing and rendering plants to dispose of their wastes efficiently has a direct bearing on the future of one of Georgia's major industries. Cost comparisons of alternative poultry plant pollution abatement methods required to meet a spectrum of water quality standards were developed by a University of Georgia project. These cost/effectiveness trade-offs are being used by the poultry processors, and the American Poultry Industry Fact Finding Conference as the basis for determining the best methods for the industry to meet its high responsibility for clean water and yet remain viable economically so as to preserve the thousands of jobs and millions of dollars of personal income that the poultry industry provides Georgia and the Southeast.

(5) Three years of tests conducted by the University of Florida with wastewater from two central Florida citrus processing plants indicate that the best place to dispose of millions of gallons of wastewater is right back in the citrus grove. The results indicate that using wastewater to irrigate citrus offers three advantages to the industry. It is a quick and inexpensive way of dispersing wastewater, the effluent supplies additional nutrients to the trees, and the disposal method can save millions of gallons of fresh ground water which would normally be used for irrigation. As a result of this research, the Coca Cola Company's Minute Maid Division is using the system to irrigate a 27-acre test grove of mature trees near Leesburg, Florida. The Florida citrus industry is following this test with keen interest and it is anticipated that if tests continue to produce successful results, others will adopt this system of waste water irrigation. It is estimated that

enough wastewater is discharged from citrus processing plants in central Florida to irrigate 20,000 to 30,000 acres of citrus annually.

(6) In Texas, about 3.5 million tons of dry manure must be stored, collected, transported, treated, disposed of, or recycled each year from confined cattle feeding operations. A Texas A&M University study has shown that an average of only 2 percent of the total manure solids is transported in runoff from open feedlots, while the other 98 percent is reduced by decomposition, evaporation, or land disposal. Most feedlot wastes are disposed on on land. This research has shown that very large amounts of manure (900 tons per acre) can be plowed deep into the soil without causing surface-water or ground-water pollution problems.

2. Matching Grants to Institutes

Analysis by Activity

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 compared with 1974
Matching grants to institutes.....	$3,000,000	$3,000,000	$3,000,000	--

Matching grants to institutes. Fiscal year 1974, $3,000,000; fiscal year 1975, $3,000,000; no change.

Section 101 of the Water Resources Research Act, in stipulating that Federal funds provided for approved research projects must be at least matched by non-Federal funds furnished by the State or other sources, provides an ideal instrument for furthering the Federal-State partnership visualized in the Act's conception. It is expected that the non-Federal inputs to the matching grant program will substantially exceed the $3.0 million of Federal funds requested. These combined funds will be used to support an estimated 100 research projects in F.Y. 1975.

In FY 1974 OWRR received 350 matching grant research proposals requesting over $12.1 million in Federal matching funds. Of these, 110 projects were selected and are being supported from the $3.0 million Federal appropriation and the $3.2 million in non-Federal funds furnished by the States. A large share of the remaining 240 proposals also dealt with urgent water problems, were well planned, and would have been selected had additional Federal funds been available to match State inputs. The number and quality of proposals submitted clearly indicate the demand for research to assist in solving pressing water resource problems and the willingness and capacity of the State institutes to participate in this cost-sharing research program on a steadily increasing basis.

The State universities and other participating universities will give priority attention in 1975 to water-related problems of Nationwide concern identified in the next section on the Title II "Additional Water Research" program. However, as this matching grant program is jointly financed by Federal and State funds, water problems identified by the State institutes and their State and Regional Advisory Committees as being of particular concern to the State, region or river basin will receive full consideration in the project selection process.

It is believed worthwhile to note that for every Federal dollar invested in the Section 101 program, better than two dollars of research productivity is realized. It is also evident, with less than one-third of the proposals being selected, that funds are being devoted to the research of only the most pressing of water resource problems.

Some recent examples of proven or potentially useful results of research supported by the Matching Grant program are shown below. Additional examples can be found in OWRR's Annual Report.

(1) The many water-related activities on the Great Lakes systems depend critically on the magnitude of lake levels and outflows. A project recently completed resulted in the delineation of magnitudes of the monthly rainfall, evaporation, and runoff components affecting lake levels. A follow-on project is extending this work to the development of hydrologic models of the Great Lakes. The models will be used to simulate the Lakes' hydrology in order to prepare better operating rules for the control works in the outflow channels and to determine the need for other control works. It is expected that the models will be employed by the Great Lakes Basin Commission in their extensive overall study of the lakes.

(2) Research previously conducted by the Illinois Institute was concerned with developing relationships between the fundamental hydraulic characteristics of streams (depth, width, velocity, etc.) which can be applied to locations where no direct measurements are available. Successful relationships were developed for eighteen river basins in Illinois and later research showed that a general approach could be applied to basins in other states. The relationships have been used to predict time-of-travel of pollutants for 41 river reaches in Illinois. The results have been used by the Argonne Laboratory in a successful development of a water quality model for Illinois rivers in which the values of the hydraulic parameters are necessary in determining the accumulative capacity of streams.

(3) Under projects conducted by the Arizona Center, economic water-harvesting systems were developed to increase the efficiency of harvesting precipitation and of water storage. As a direct result of these studies, the Water Resources Research Center of the University of Arizona was contracted by the Papago Tribe to construct three water-harvesting systems for livestock watering on reservations where no other water source was available. The systems were built using Papago Vocational High School students from Sells, Arizona. The results obtained from this project can be extended to other semiarid regions throughout the western United States and the world where additional water supplies are needed.

(4) A University of Montana project has resulted in the development of a planning model intended to be used primarily as a management tool by the Water Resources Division of the State Department of Natural Resources and Conservation. It is expected to provide impersonal, accurate, and speedy answers to water management questions such as "what will be the effect on the river basin of diverting flows from a particular stream for a new thermal energy plant?" or "what changes in streamflow can be expected by constructing a new storage dam at a specified location?" This data bank also provides ready access to hydrologic and other physical information relating to Montana which are not otherwise available from a single source. The States of North Dakota and Wyoming are greatly interested in this model and a joint research proposal is currently being prepared which would further extend the use of the model to all three States.

3. Additional Water Research

Analysis by Activity

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 compared with 1974
Additional water research.....	$4,300,000	$3,170,000	$3,170,000	--

Additional water research. Fiscal year 1974, $3,170,000; fiscal year 1975, $3,170,000; no change.

The "additional water research" or "Title II" program provides balance and flexibility to the overall water research program by giving the Department access to the specialized research expertise available in private firms and foundations, governmental agencies at all levels, as well as universities not participating in the Title I program. It is expected that the $3,170,000 requested for this activity will permit funding for projects to augment and expand work carried out under the Title I program.

The 1975 Title II research program will be directed primarily toward support of the water and water-related aspects of priority objectives of the Department including: solving energy related problems; encouraging Indian self-determination and improvement; solving land use problems; promoting efficient allocation and conservation of scarce water and water-related resources in a manner compatible with environmental considerations; developing means of achieving more efficient resource management such as reuse and recycling of water; reassuring the economic value of additional agricultural development and improved irrigation efficiencies in order to save resources; and protecting and improving the quality of our physical environment.

In addition to these Departmental objectives, OWRR has again notified all individuals and organizations, expressing an interest in submitting proposals, of general subject areas of prime interest along with examples of specific research requirements. A summary description of these priority research subjects is set forth on Attachment No. 1 following this Title II statement.

For the 1974 "Additional water research" program, over 340 research proposals were received from private firms, universities and others for OWRR's consideration. Total funding requested by these proposals exceeds $31 million. Forty-three of these proposals have been selected for support. OWRR anticipates that it will receive approximately the same number of proposals for 1975 as were submitted for consideration in the 1974 program. The large number of proposals submitted permits the Department to be very selective in supporting only those having the highest technical merit and greatest relevance to water resource matters of concern to the Department and the Nation.

A few illustrative examples of Title II program project results developed in the past year are set forth below:

(1) The University of Texas has developed a practical and effective strategy of optimization that can be applied to the expansion of a complex water resources system. The problem involved is to specify if and when each dam should be built in the system and also the sequence of reservoir releases so that the revenue function for the water resources system is maximized. To accomplish the objectives, several computer programs have been prepared which carry out the numerical computations for a given water resources system. With the aid of the documentation associated with the computer programs, it is possible to determine what information has to be gathered from the water resources system. Once the information is collected, it is

possible to use the computer code to help decisionmakers in evaluating alternative policies over a planning horizon of a large number of years.

(2) A Purdue University Title II project has developed rainfall-ground-water level interaction models for short term forecasting of ground-water levels. The predicted ground-water levels can then be used to specify the variable boundary conditions encountered in the digital ground-water model. The ground-water model now being developed will aid in investigating whether a presently used source of water is adequate to meet the domestic and industrial water requirements in Tippecanoe County, Indiana by the year 2020.

(3) Research by a Walnut Creek, California firm resulted in the development of a method of ecologic simulation for aquatic environments. This provides a useful tool, not previously available, which enables engineers, scientists, and planners to utilize ecologic information in the development and management of water resources. Already there has been a lively response to the findings. The Corps of Engineers' Hydrologic Engineering Center has been granted permission to reprint the report for use in a water quality management training course. A valuable "pay-off" is being realized, under a memorandum of understanding between OWRR and EPA, whereby the project has been extended to apply the research results to the solution of critical water-quality problems in Puget Sound, Washington. Recently the Netherlands has requested assistance in possibly applying this technique to water quality prediction in the polder areas of their country.

(4) A substantial number of families in this country, and particularly in the New England area, are entirely dependent on wells in crystalline rock for their water supply. Commonly the yields from such wells is inadequate or quite small. Research at the University of New Hampshire is seeking to determine if hydraulic fracturing is an effective and economical means of stimulating water well yields. Research results, thus far, in two test wells show that yields of each well were increased from 4 gallons per minute to about 15 and 24 gallons per minute respectively.

(5) Concentrations of naturally occurring uranium and isotopic ratios have been used successfully in a Florida research project to identify the sources of ground water supplying three major Florida springs and one spring-fed river system. This technique may be adapted to evaluating the pollution potential of ground water in specific areas, evaluating the potential hazard for salt-water intrusion in coastal areas, and determining areas and rates of ground-water recharge.

(6) A dynamic programming optimization procedure that determines the sequence of releases and withdrawals from a system of multiple reservoirs supplying water to metropolitan centers has been developed by a Title II project in Texas. The procedure takes into consideration water losses due to evaporation, flow augmentation requirements and flood spillages and determines the minimum cost policy to meet the metropolitan requirement, while retaining a specified volume of water in storage at the end of a time period. Water treatment costs, power and pumping costs and purchase water costs are included in costs evaluated. The program is currently being implemented and tested on the City of Dallas computer system.

Attachment No. 1

Office of Water Resources Research
Examples of Priority Research Subjects for Title II Support
Fiscal Year 1975

The Title II research program of the Office of Water Resources Research will be directed primarily toward support of certain current priority objectives of the Department of the Interior. These include:

- Solving of Energy Problems.
- Encouraging Indian Self-Determination and Improvement in the Quality of Life on Indian Reservations.
- Solving Land Use Problems.
- Promotion of Efficient Allocation and Conservation of Scarce Water and Water-Related Resources in a Manner Compatible with Environmental Considerations. Developing means of achieving more efficient resource management such as reuse and recycling of water, reassessing the economic value of additional agricultural development and improved irrigation efficiencies in order to save resources, thus reducing the need for large capital investments of the future.

  Improving the Quality of our Physical Environment.

In addition to the above Departmental objectives, OWRR has again identified general subject areas of prime interest. These are listed below, with examples of specific research requirements.

Many water-related resource problems are applicable to both Departmental priority objectives and OWRR subject areas of prime interest. Proposals for research which offers a high assurance of increased effectiveness in dealing with such dualistic problems will receive strong consideration for funding.

OWRR will also consider funding other subject areas of research not included on this priority list if the research proposal provides convincing reasons that the subject area is of high priority and within the purview of Title II of the Water Resources Research Act of 1964, as amended.

OWRR Priority Research Subjects

1. Improvement of Water Resource Planning, Managerial, Financial, Operating and Regulatory Policies. In approaching this problem, research goals should be to provide a basis for establishment of improved mechanisms, including evaluation of alternative means of augmenting and conserving supply, for water resources planning, implementation of plans, and to improve management effectiveness through lessening of conflicts, uncertainties, and confusion among claimants to the resource.

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2. Water Resources Policy and Political Institutions. Understanding of policy and institutional problems is indispensable to sound water resources management by both the public and private sectors of the Nation. Research is needed on how institutional policy is measured and formulated and what policies and arrangements are conducive to sound water management. Among the questions to which research could be directed are those involving current policies and institutions. The river basin as a water management unit needs further evaluation with respect to the compatibility of water resources management objectives and the needs of regional economic development.

3. Hydrologic Systems Analysis. The application of operations research tools such as mathematical modeling and simulation, optimization and design theory need to be assessed and further explored in relation to hydrologic events and to planning of surface and ground water resources development.

4. Urban and Metropolitan Water Resources Problems. Research is needed on urban hydrology and the effect of man's activities on water. Such research could include evaluation of the impact of urbanization on the frequency and magnitude of flood peaks, reduction of low flows, decrease in natural ground water accretion, impairment of water quality, erosion, etc., and development of methodology and technology to cope with such problems.

5. Ecologic Aspects and Environmental Consideration of Water Resources Planning and Management. Improved means of identifying, assessing and predicting ecologic impacts of water development such as dam building, drainage, irrigation, dredging, filling, channelization, and weather modification are needed. Conjunctive ecological studies designed to minimize harmful effects and optimize the beneficial effects of these water developments on the environment are also indicated.

6. Evaluation of Economic Importance of Various Uses of Water, Cost Allocation, Cost Sharing, Pricing and Repayment. Methodologies are needed for estimating future water demands in time, place, and quality with full consideration given to the economic relationships between supply and demand as well as the impact of new technologies. Research is needed for improving the methods used in evaluating primary, secondary and externality benefits of water resources projects.

7. Analysis and Evaluation of Water Resources Projects. Benefit-cost analysis has been the principal tool for evaluation of public investment programs, including watershed and water resources programs. It has ranked projects and programs in terms of the objective of economic efficiency only. Research is needed to determine appropriate alternatives and multi-objectives which will insure that presently unquantified environmental amenities and values may be given appropriate considerations. Evaluation of methods to quantify values in terms of appropriate objectives and assigning weights to these values is needed so that alternative objectives and/or combinations of objectives can be compared.

8. Ground-Water Supply, Management, and Protection. Research is needed on management methods and techniques to protect the ground-water resource from degradation and overdraft; also to insure its availability and safety for

domestic, municipal, industrial, and agricultural purposes, and to accomplish the integrated management of surface and ground water resources. In many areas over the Nation, productive aquifers find limited use because the quality of the native ground water is unacceptable or the water has become contaminated. Many constituents or properties imparting objectionable tastes, odors, or esthestic traits exceed allowable limits. Better techniques should be researched as to feasibility of water spreading and well injection in various surficial earth materials and aquifers. Research is particularly applicable in regions where the surficial materials are of low permeability. Research is needed also on the geochemical effects of artificial ground-water recharge.

Regarding the degradation of ground-water quality by contaminants, basic research is needed on the geochemistry--reactions among water soil and rock materials, and contaminants in the aquifer system.

A serious deficiency of aquifer system models is the inability to portray accurately fluid movement in the unsaturated zone, losses from the system by evapotranspiration, and accretions by infiltration or recharge. This aspect of fluid movement also has an important influence on surface runoff. Research is needed on the physics of fluid movement and solute interactions in unsaturated granular media.

9. Protection and Rehabilitation of Estuarine Resources. Research is needed to develop criteria, standards and guidelines for including ecological effects in planning for water resource development of estuaries and coastal bays, such as: dredging, filling, dams, diversions, land-cut canals, hurricane barriers, and waterfront finger-type developments. These studies should attempt among other things to assess the biological effects of these developments by changing temperature, salinity, flow regimes, circulation, flushing and sedimentation, and destruction of vegetation.

10. Thermal Loading Problems. With the expected increase in number of electric generating plants and the consequent thermal loading of rivers, lakes, and estuaries, increased research attention is needed to develop new or improved approaches to physical mixing and thermodynamics of the heated discharges; in development of economically competitive alternatives to use of once-through water as a heat-transfer medium; on biologic, ecologic, environmental and sociologic impacts, on types and quantities of data required to properly evaluate facility sites and to choose among alternative sites; on adequacy of regulations and procedures for site selections with respect to water use and management; and on possible ways of beneficially utilizing the heat for food production, recreation, or other purposes.

11. Water Demand Considerations. In regions where water supply is unable to keep up with demand, the value of water for specific purposes will increase. Further research is needed on the effect of price on demand with specific attention to the value of water for irrigated agriculture, recreation, industry, urban use and other purposes. Research is also needed to determine appropriate alternative objectives and to develop methods to evaluate benefits in relation to costs for the different objectives, such as, improved distribution of population, environmental quality, and other social values.

4. Scientific Information Center

Analysis by Activity

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1974 Estimate	Increase (+) or Decrease (-) 1975 compared with 1974
Scientific information center.....	$934,000	$934,000	$940,000	$+6,000

Scientific information center: Fiscal year 1974, $934,000; fiscal year 1975, $940,000; an increase of $6,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$+6,000	--	$940,000	8	Pay raise costs

With the proposed $940,000, OWRR's Water Resources Scientific Information Center (WRSIC) will continue its 1975 operations at approximately the same level as in 1974.

In 1975 WRSIC will:

(a) Acquire about 15,000 additional abstracts reflecting the results of completed water resources research as described in technical journals and reports, monographs, books and serials; process these abstracts into machine-readable form for WRSIC's information base; and publish these abstracts with appropriate indexing terms in WRSIC's "Selected Water Resources Abstracts" bulletins that are made available to the water resources community on a twice monthly basis;

(b) Support 9 "literature centers of competence" providing abstracts for the WRSIC information base, and encourage and obtain the cooperation of Federal, State, and other organizations in providing information base abstracts;

(c) Publish, in collaboration with the Smithsonian Science Information Exchange, a comprehensive annual catalog of abstracts describing ongoing research projects;

(d) Prepare and disseminate several topical bibliographies of special interest and a limited number of state-of-the-art reports on selected subjects;

(e) Respond to the technical information needs of water program officials by employing an automatic retrieval program and growing information base of approximately 70,000 citations and abstracts to economically and rapidly generate topical bibliographies of significant problem areas, and respond to special requests for literature reference relating to specific water resource interests; and

(f) Continue an experimental program of operating a small number of geographically dispersed remote terminals to determine the feasibility of providing improved technical information services.

WRSIC's importance to the Nation's water resources community has steadily grown as its information base has expanded and its reputation for responsiveness has become well known. The Center is: (a) playing a major role in the avoidance of undesirable research replication, thereby contributing to more effective use of available water resources research dollars; (b) improving communications and coordination of efforts among organizations and individuals engaged in water-related research; and (c) serving as a focal point for water resources research information through its com-

prehensive and responsive program. Persons and organizations familiar with the Scientific Information Center's program have been highly complimentary and have in many cases urged continued expansion of the program as rapidly as funding will permit.

5. Administration

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 compared with 1974
Administration.....	$970,000	$1,025,000	$1,051,000	$+26,000

Administration: Fiscal year 1974, $1,025,000; fiscal year 1975, $1,051,000; increase $26,000. The increase consists of:

Increase (+) or Decrease (-)		Total	Total	
Amount	Positions	Program	Positions	Explanation
$+26,000	--	$1,051,000	38	Portion of space rent costs

The requested "administration" funds will provide support for salaries and related program planning, development, management, operating and housekeeping activities of the Office of Water Resources Research.

In 1975 OWRR's program administration staff will:

(a) Provide overall direction of the OWRR program, striving continually to increase the cost-effectiveness of the research effort while at the same time minimizing the program management and administrative workload in keeping with the capacity of the small staff;

(b) Provide programming, budgeting, and related administrative/management support to include determination of priority water resources problem areas and analysis of research needs;

(c) Review and evaluate approximately 1,000 new research proposals and execute some 200 new contract and grant documents;

(d) Provide technical and administrative monitoring of over 500 on-going grants and contracts;

(e) Review and process an estimated 1,400 reports and documents stemming from OWRR supported research;

(f) Provide technical and administrative guidance to several hundred existing or potential program participants by means of personal contacts, phone calls, and voluminous correspondence.

(g) Coordinate the OWRR research program with related activities of other agencies on a Nationwide basis;

(h) Conduct conferences and meetings as appropriate for effective program operations;

(i) Encourage close collaboration among OWRR, its supported institutes, and water resource officials at National, Regional, and State levels during all phases

of program development and implementation to assure that the research effort is directed toward the solution of urgent water problems and responsive to real life needs.

(j) Arrange for "critical reviews" by recognized experts to determine specific goals, objectives, progress, needs and priorities for additional research in selected water resource subject areas. These critical reviews may be the result of symposiums, special advisory panels or be obtained by contractual arrangements with consultants having special expertise in the particular field of interest.

Such reviews are of importance to OWRR, the State Centers, and others in keeping them informed as to requirements in specific technical areas which are unmet by the current state-of-the-art, and in assuring that research under the Act remains focused on urgent water problems and does not duplicate completed or ongoing research.

The increase for "Administration" is due to a new cost item, $59,000 for space rental costs, with offsetting reductions of $33,000 in other administration costs for a net increase of $26,000.

Personnel Summary

	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions.....	46	46	46
Full-time equivalent of other positions.....	1	1	1
Average paid employees.....	39	43	43
Average GS grade.....	10.9	11.1	11.1
Average GS salary.....	$20,165	$20,497	$20,837

ITEMIZATION OF ESTIMATE

Appropriation Title: Salaries and Expenses — Office of Water Resources Research

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) Decrease (-)
Program and Financing:				
Total obligations	$14,279,611	$13,229,000	$12,700,000	$ -529,000
Unobligated balance lapsing	24,389	--	--	--
Budget authority (Appropriation)	$14,304,000	$13,229,000	$12,700,000	$ -529,000
Object Classification:				
11 Personnel compensation	$ 777,842	$ 863,000	$ 839,000	$ - 24,000
12 Personnel benefits	70,633	77,000	76,000	- 1,000
21 Travel and transporation of persons	23,395	27,000	27,000	-
22 Transportation of things	1,794	2,000	2,000	-
23 Rent, communications, and utilities	15,095	18,000	83,000	+ 70,000
24 Printing and reproduction	77,980	80,000	80,000	-
25 Other services	1,821,264	1,456,000	1,453,000	- 3,000
26 Supplies and materials	5,924	7,000	7,000	-
31 Equipment	3,701	5,000	5,000	-
41 Grants, subsidies, and contributions	11,481,783	10,694,000	10,123,000	-571,000
TOTAL	$14,279,611	$ 13,229,000	$12,700,000	$ -529,000

DEPARTMENT OF THE INTERIOR

Bureau of Outdoor Recreation

Salaries and Expenses

Appropriation, 1973	$ 4,150,000
Second supplemental appropriation, 1973	72,000
Total appropriation, 1973	4,222,000
Appropriation, 1974	4,396,000
Pay cost supplemental (January & October pay raises	332,000
Total appropriation, 1974	4,728,000

Summary of Increases and Decreases, 1975

	Base for 1975	Increase (+) or Decrease (-) 1975
Planning and Research		
Program decrease, completion of Nationwide Plan	$2,227,000	$-241,000
Program increase, wild rivers and trails		+160,000
Statutory within grade increases		+18,000
Space rental costs		+99,000
October payraise		+27,000
Federal Coordination		
Statutory within grade increases	1,276,000	+11,000
Space rental costs		+57,000
October payraise		+16,000
Technical Assistance		
Program increase, surplus property aspects, "Legacy of Parks"	1,225,000	+80,000
Statutory within grade increases		+11,000
Space rental costs		+58,000
October payraise		+16,000
Net increase, 1975		312,000
Budget estimate, 1975		$5,040,000

SALARIES AND EXPENSES

Analysis by Activities

Activity	F.Y. 1973 Amount Available	F. Y. 1974 Total Appropriation	Pay Cost Supplemental	Transfers	Amount Available
1. Planning and Research ----------	$1,973,902	$2,071,000	$ 156,000	--	$2,227,000
2. Federal Coordination ----------	1,141,234	1,186,000	90,000	--	1,276,000
3. Technical Assistance ----------	1,093,321	1,139,000	86,000	--	1,225,000
Unobligated Balance Lapsing ----	13,543	--	--	--	--
Total ----------	$4,222,000	$4,396,000	$ 332,000	--	$4,728,000

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
1. Planning and Research ----------	$1,973,902	$2,227,000	$2,290,000	$ +63,000
2. Federal Coordination ----------	1,141,234	1,276,000	1,360,000	+84,000
3. Technical Assistance ----------	1,093,321	1,225,000	1,390,000	+165,000
Unobligated Balance Lapsing ---	13,543	--	--	--
Total ----------	$4,222,000	$4,728,000	$5,040,000	$312,000

1. PLANNING AND RESEARCH

Analysis by Subactivities

	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
1. Nationwide Planning ----------	$ 251,475	$ 268,000	$ 29,000	$-239,000
2. Water Resources and Resource Area Studies ----------	1,636,167	1,866,000	2,160,000	+294,000
3. Research and Education --------	86,260	93,000	101,000	+8,000
Total ----------	$1,973,902	$2,227,000	$2,290,000	$ +63,000

1. PLANNING AND RESEARCH

A. Nationwide Planning: Fiscal year 1974, $268,000; fiscal year 1975, $29,000; decrease $239,000. The decrease consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$-241,000	-9			Completion of the Plan.
(2)	+2,000	--			Share of space, service and facilities.
	$-239,000	-9	$29,000	1	

Cost Factors Involved

(1) Annual salaries and related costs of 9 positions reallocated to other priority programs as a result of the completion of the Nationwide Plan, a reduction of $241,000.

(2) Proportionate share of space rental costs.

The reduction reflects completion of the Nationwide Outdoor Recreation Plan and the reassignment of most of the Planning Team to other BOR priority programs. In FY 1975 the principal activity will be beginning work on updating on the five-year cycle required by P.L. 88-29 to include the following:

(1) Monitoring the development of statistics and surveys by Federal and other public and private agencies to be used in the next updating of the Plan.

(2) Participating with the National Association of Conservation Districts, the Soil Conservation Service, and others in a nationwide inventory of private recreation facilities.

(3) Improving the information basis and coordination of information needed in updating the Plan.

(4) Informing the public, upon request, of background statistics and information upon which the Plan is based.

Highlights of Recent Accomplishments--The President transmitted the nationwide plan entitled Outdoor Recreation - A Legacy for America to the Congress on December 19, 1973.

The Plan has been submitted to members of the Congress, the Governors of the States, and distribution is underway to others interested. The Bureau prepared this Plan in compliance with P.L. 88-29. The action plan contained therein was fully coordinated with the Federal agencies and other public and private groups. Public forums and other opportunities for wide participation were provided throughout the preparation of the Plan.

The final environmental statement on the Nationwide Outdoor Recreation Plan was completed by the Bureau on December 10, 1973. Notice of the availability of the statement was published in the Federal Register on December 17, 1973.

B. Water Resources and Resource Area Studies: Fiscal year 1974, $1,866,000; fiscal year 1975, $2,160,000; increase, $294,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+160,000	+6			Acceleration of rivers and trail studies.
(2)	+17,000	--			Within-grade salary cost.
(3)	+91,000	--			Share of space, service and facilities.
(4)	+26,000	--			E.O. 11739 payraise.
	$+294,000	+6	$2,160,000	90	

This subactivity may be further divided:

	1974	1975	Increase
Water Resources Studies	$1,240,000	$1,321,000	$ 81,000
Resource Area Studies	626,000	839,000	213,000
Total	$1,866,000	$2,160,000	$294,000

Cost Factors Involved in Increase

(1) Annual salaries and related costs of six positions reallocated from nationwide planning activities for acceleration of rivers and trails studies, $160,000.

(2) Statutory within-grade salary advancements.

(3) Proportionate share of space rental costs.

(4) Additional one quarter's cost of October 1973 payraise.

Water Resources Studies

No additional positions are requested in fiscal year 1975; this activity will remain at basically the same program level as in the previous year.

The Bureau's activities in the field of Federal water resources planning stem primarily from the Bureau's Organic Act (P.L. 88-29), the Federal Water Project Recreation Act of 1965 (P.L. 89-72), and the National Environmental Policy Act of 1969 (P.L. 91-190). Planning work will continue in three major areas:

Investigation of Federal Water Developments--The Bureau participates in studies of the recreation aspects of selected Bureau of Reclamation and Corps of Engineers and other Federal water resource development studies. Studies are conducted to relate proposed water development projects to public recreation needs and to ascertain the impacts on outdoor recreation, natural and scenic resources and associated environmental values. Full consideration is given to these elements as identified in the State comprehensive outdoor recreation plans which are required by the Land and Water Conservation Fund Act (P.L. 88-578). The Bureau recommends resource conservation and recreation use enhancement measures

for consideration in project plan formulation and encourages non-Federal administration of recreation developments on Federal projects.

Review of Project Reports, License and Permit Applications, and Environmental Impact Statements--The Bureau reviews reports on water resource development proposals by the Corps of Engineers, Bureau of Reclamation, and other governmental agencies, and by private interests requiring a Federal action, license, or permit. Special reviews are made where postauthorization studies of selected Corps of Engineers projects result in significant changes in recreation benefits and costs.

The Bureau determines whether adequate consideration has been given to the preservation of natural, scenic, and recreation resources and related environmental values; to the opportunities which the project may afford for meeting outdoor recreation needs; and to the consistency of the proposals with the policies established by the Nationwide Plan. A determination is also made as to the extent to which proposed recreation and fish and wildlife development conforms to and is in accord with State comprehensive outdoor recreation plans.

The Bureau reviews environmental impact statements prepared in accordance with P.L. 91-190 for proposed Federal water resource developments and for license and permit actions. Comments are made concerning the adequacy of the consideration given to recreational resources and related environmental values and to feasible alternatives which would avoid adverse impacts. Applications for Corps of Engineers permits for dredging, filling, excavation, or other related work in navigable waters are reviewed by the Bureau. Substantive comments are provided on selected permit applications where signficant recreational and environmental values are involved.

The Bureau reviews proposals for hydroelectric projects subject to licensing by the Federal Power Commission to assure that optimum public access and recreational opportunities are provided. An increasingly important part of the review function involves the provision of planning assistance to utilities during the early stages of project planning to identify public recreation needs that can be met by the private sector.

Water and Iand Use Planning--Comprehensive water and related land resources planning for the Nation is an interagency program coordinated by the Water Resources Council. Field studies are scheduled in accordance with a consolidated interagency budget which provides for reimbursable financing of the work. The Bureau conducts regional studies of outdoor recreation potentials and environmental values, giving full consideration to alternative or competing uses of the resources. A determination is made of the outdoor recreation needs which can be met through conservation, development, and use of water and related land resources. The Bureau assists in plan formulation and prepares reports for river basin commissions or other Federal-State interagency groups having primary responsibility for developing a coordinated plan. The studies identify areas having outstanding recreational and environmental values needed for the Federal recreation estate and those appropriate for non-Federal administration. The Bureau also assists in data collection.

In addition, the Bureau will participate in the 1975 Assessment of Water and Related Land Resources. The recreation water needs will be identified as a part of the Nation's severe and emerging water problems requiring resolution by national, State, and regional actions.

Highlights of Recent Accomplishments--Within the past year, the Bureau participated in more than 100 Federal water resource development projects proposed mainly by the Bureau of Reclamation and the Corps of Engineers. These projects included a general plan of development with respect to outdoor recreation and related environmental values.

The Bureau reviewed and commented on approximately 900 water resources development proposals submitted by Federal and non-Federal interests during the past year. Of these proposals, about 450 involved environmental impact statements. About 90 were water resources project reports initiated by the Bureau of Reclamation and the Corps of Engineers. Other reviews were made of 60 proposals by utilities requiring licensing by the Federal Power Commission; about 170 recreation related reports of other agencies; and 160 public notices of applications for permits in navigable waters. In addition, the Bureau provided planning assistance to eight applicants with non-Federal project proposals involving the development of recreation plans as part of the Federal Power Commission license application.

The Bureau's participation in comprehensive water and related land resources planning studies involved 13 major water resources regions during the past year. Major effort in providing recreation and related environmental input also continued on the Western U.S. Water Plan under the direction of the Bureau of Reclamation.

Resource Area Studies

The Bureau's activities in this area are under authorities delegated from the Bureau's Organic Act (P.L. 88-29), the Wild and Scenic Rivers Act (P.L. 90-542), the National Trails System Act (P.L. 90-543), the Wilderness Act (P.L. 88-577), the Alaska Native Claims Settlement Act (P.L. 92-203), and the National Environmental Policy Act of 1969 (P.L. 91-190).

Need for Increase--The studies of the wild and scenic rivers and trails proposals have become considerably more complex as a result of the need to consider the requirements of the National Environmental Policy Act of 1969 (including the preparation of environmental impact statements), various State and Federal water quality acts, and other legislation. While the full impact of the new principles and standards for planning for water and related land resources announced by the Water Resources Council on the wild and scenic rivers studies has not been evaluated, it is obvious that the need for the preparation of alternative plans and the several accounts will have a considerable impact. This, together with the efforts to solicit State particpation in the acquisition, development and administration of all or portions of the proposals, has slowed study progress. Six additional positions are required in FY 1975 and $160,000 for salaries and related benefits plus travel and other support costs to maintain the study schedule and complete the studies in accord with legislative and administrative guidelines.

Wild and Scenic Rivers Studies--Section 5(a) of the Wild and Scenic Rivers Act (P.L. 90-542) designated 27 rivers for study before October 2, 1978, to determine if they should be included in the National System. Reports on nine of the 18 rivers assigned to the Bureau will have been completed by July 1, 1974. Bureau-led studies on the remaining nine are presently underway. Of the nine river studies under the leadership of the Forest Service, one is completed. Funds requested by the Forest Service in FY 1975 will permit the agency to essentially complete five and make substantial progress on the remaining three.

The additional manpower requested will enable the Bureau also to make substantial progress toward completion of the river studies orginally assigned to it. The rate of urbanization and increasing development of second-home communities associated with recreation areas is an increasing burden on the remaining natural river resources. The situation is even more critical than that which existed at the time the legislation was enacted and Congress expressed its interest in preserving significant wild river resources. It, therefore, becomes imperative that the study schedule be adhered to and the studies completed as rapidly as possible. Bills on more than 30 rivers are now pending before the Congress for addition to the study category (section 5(a)) of the Wild and Scenic Rivers Act. If authorized, studies of many of these rivers will be the responsibility of the Bureau of Outdoor Recreation. The Bureau will also participate in those additional river studies led by the Forest Service.

Technical assistance will be provided to State and local governments interested in developing wild rivers systems or in measures to protect the values associated with rivers in which they have an interest. Emphasis will be placed on any request for assistance from Alaskan Native or regional organizations interested in protecting rivers on lands which they are selecting under the provisions of the Alaska Native Claims Settlement Act (P.L. 92-203).

National Scenic Trails Studies--Fourteen long-distance trails were named in section 5(c) of the National Trails System Act for study to determine the feasibility of including them in the National Trails System. Studies on two of these trails will be completed in FY 1974. The additional manpower requested in FY 1975 will enable the Bureau to complete six national trails studies in that year, continue work on five and initiate the fourteenth study.

The Bureau also will be able to intensify its efforts with other Federal agencies to further the establishment of national recreation and other trails and work toward the integration of trails on Federal lands with those on other public lands, State and local. This activity is supportive of recommendations in the Nationwide Outdoor Recreation Plan.

The increased personnel also will allow the Bureau to strengthen its efforts to encourage the establishment of hiking, biking and riding trails readily accessible to urban concentrations as a means of meeting everyday, close-to-home recreation needs. This will include assisting agencies and groups to capitalize on the recreation trail possibilities of utility rights-of-way and abandoned railroad properties. A special program is continuing in this area in Alaska where evaluations are being made of transportation corridors for their recreation and trail development potential.

Wilderness Areas--The Bureau will continue to review Bureau of Sport Fisheries and Wildlife, National Park Service and Forest Service wilderness proposals and related environmental impact statements under authorities delegated by the Secretary in order to determine the extent to which they provide needed recreation opportunities and to evaluate their impact upon other recreation proposals and uses as well as to ensure conformance with the Wilderness Act (P.L. 88-577). Secretarial directives will extend this work beyond the study timeframe of the Act and will increase the effort required; for example, in the case of some 274 "new study areas" recently selected for study as potential wilderness areas from an inventory of 1,449 areas of undeveloped national forest lands.

Highlights of Recent Accomplishments--During the past year, the Bureau's Alaska Task Force conducted detailed studies on 28 rivers. As a result of these studies, the Secretary of the Interior, in compliance with the Alaska Native Claims Act,

has proposed adding 20 new units totaling some 2,750 river miles to the National Wild and Scenic Rivers System. While 16 of these rivers lie within the boundaries of other proposed areas, four rivers totaling 705 river miles and 800,000 acres of adjacent lands would be established as separate units of the National System.

On August 20, 1973, the Little Miami River was added to the National Wild and Scenic Rivers System by the Secretary of the Interior pursuant to a request from the State of Ohio. During FY 1974, the Bureau completed and forwarded to Congress reports on eight rivers listed in section 5(a) of the Wild and Scenic Rivers Act and initiated field work on the Bruneau and Penobscot Rivers. Studies continued on the Buffalo, Gasconade, Little Beaver, Maumee, Pine, Rio Grande and Youghiogheny Rivers.

In F.Y. 1974, studies will be completed on two trails, the Potomac Heritage Trail and the Continental Divide Trail. Studies will be continued on two trails and initiated on nine others. A brochure was published, National Recreation Trails - Information and Application Procedure, outlining the procedures which citizens and conservation groups, public officials and others may use to apply for national recreation trail designation. Seven national recreation trails were added to the National Trails System in F.Y. 1974 with the approval of the Secretary of the Interior. This brings to 44 the number of trails so designated.

The Bureau reviewed and commented on 50 wilderness proposals and related environmental impact statements prepared by the Bureau of Sport Fisheries and Wildlife, National Park Service and Forest Service, each requiring examination in both preliminary and final form.

C. Research and Education: Fiscal year 1974, $93,000; fiscal year 1975, $101,000; increase, $8,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+1,000	--			Within-grade salary cost.
(2)	+6,000	--			Share of space, service and facilities.
(3)	+1,000	--			E.O. 11739 payraise.
	$+8,000	--	$101,000	5	

Cost Factors Involved in Increase

(1) Statutory within-grade salary advancements.

(2) Proportionate share of space rental costs.

(3) Additional one quarter's cost of October 1973 payraise.

In FY 1975, the Bureau will continue to maintain relationships with the major public and private agencies, institutions and organizations engaged in outdoor recreation research and environmental education. The Bureau will foster implementation of appropriate research and education recommendations contained in the Nationwide Outdoor Recreation Plan.

The Bureau in its coordinating role in the field of recreation research is cooperating with the Forest Service through its Pinchot Institute in a study of the status of the second home and leisure community development in the United States. Probable future directions for the leisure home phenomenon will be projected under different policy options.

The Bureau will continue to participate with groups working in research and education activities. The Bureau initiated and co-sponsors a monthly Recreation Research Roundtable to foster cooperation and information exchange among administrators of recreation research programs. A major purpose is to identify nationwide research priorities.

The Bureau will continue to participate in Departmental research-oriented activities, such as the Earth Resources Observation Satellite (EROS) and Resources and Land Information (RALI) program efforts.

As a means to facilitate research, coordination, and consistency among interested parties at all levels of recreation interest, the Bureau will publish a glossary of outdoor recreation terms.

Another in a series of the Bureau's Outdoor Recreation Research Registers was published during the fiscal year.

2. FEDERAL COORDINATION

Federal Coordination: Fiscal year 1974, $1,276,000; fiscal year 1975, $1,360,000; increased $84,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	
(1)	$+11,000	--			Within-grade salary costs.
(2)	+57,000	--			Share of space, services and facilities.
(3)	+16,000	--			E.O. 11739 payraise.
	$+84,000	--	$1,360,000	61	

Cost Factors Involved

(1) Statutory within-grade salary advancements.

(2) Proportionate share of space rental costs.

(3) Additional one quarter's cost of October 1973 payraise.

A. Federal Programs Review

Federal Recreation Program Review--Pursuant to Sections 2(g), 3 and 3(a) of P.L. 88-29, the Bureau coordinates Federal plans and activities generally related to outdoor recreation. This coordination effort involves evaluation of various

programs and special studies and monitoring the growing number of Federal programs contributing to or affecting recreation. Federal programs provide a vast amount of public recreation opportunities, but they are numerous, complex and diverse. The objective of the Bureau's Federal coordination effort is to maximize the effectiveness of recreation programs through improved coordination among Federal agencies as well as with State and local governments and the private sector.

Recreation Energy Implications--As directed by the Secretary of the Interior, the Bureau is coordinating the response of Federal recreation land managing agencies to the energy shortage. This work will involve stimulating planning by individual agencies of the Department of the Interior to operate public recreation areas and facilities with minimum drain on precious energy resources while meeting essential public requirements for constructive use of increasingly available leisure time. It simultaneously will require seeking cooperation of non-Interior Federal agencies in achieving the same objective.

Nationwide Outdoor Recreation Plan Implementation--During F.Y. 1975, the Bureau will emphasize coordination of recreation activities of Federal and related agencies as required by Sec. 3(b), P.L. 88-29, following policies and guidelines developed through the Nationwide Outdoor Recreation Plan, entitled Outdoor Recreation - A Legacy for America.

P.L. 88-29 directs Federal departments and independent agencies to carry out recreation "responsibilities in general conformance with the Nationwide Plan." The Plan presents four major areas for implementation: (1) increase the availability of recreation resources; (2) improve the Management and administration of recreation resources and programs; (3) increase the effectiveness of recreation assistance programs; and (4) improve recreation planning at all levels of government and the private sector.

The Nationwide Plan is a strong vehicle for achieving interrelated planning by all levels of government and private recreation interests. The greater the problem, such as created by the energy crisis, the greater the need for cooperative planning that will assist all managers to arrive at the most effective courses of action.

Implementation of the Nationwide Plan will increase efficiency in the Federal structure by resolving mutual outdoor recreation problems and stretching dollars to the furthest degree. Plan implementation will be accomplished within existing budget allocations.

Review of Environmental Statements and Section 4(f) Determinations--The Bureau's environmental impact and Section 4(f) activities are concerned with all forms of transportation projects--highways, airports, bridges, railroads, and urban transit systems--which receive Federal assistance. As the lead agency (95% of the time) in preparing Interior's comments on environmental statements, the Bureau's objectives are: (1) to minimize the encroachment of transportation projects on public parks, recreation areas, wildlife and waterfowl refuges, and historic sites of national, State, or local significance; (2) to ensure that all possible planning has been done to minimize harm to such areas when encroachment is unavoidable; (3) to ensure that the potential of the Nation's highway program in meeting the outdoor recreation needs is fully realized.

Section 4(f) determinations, when required, are now an integral part of the Department of Transportation environmental impact statements. Bureau work

entails a preliminary screening of all statements and coordination with other Interior agency programs involving existing and proposed park and recreation areas, such as wild and scenic rivers, trails, national recreation area, wildlife and waterfowl refuges, historic sites, etc. This work requires attendance at inter-agency meetings, public hearings, field inspections, preparation of reports and comments, and general coordination with concerned Federal, State and local officials. In order to utilize our limited manpower in the most effective manner, we are presently giving priority to those environmental statements which indicate a probability of major recreation environmental consequences.

Additional Federal Coordination Functions--In addition the Bureau will undertake to: (a) continue coordination efforts in the implementation of E.O. 11644 and Departmental policies and regulations concerning off-road vehicles, and provide service and assistance to the public concerning off-road vehicle use on public lands; (b) update information and report on measures to meet the specific recreation needs of the physically handicapped; (c) prepare and publish a report on the liability for private recreation entrepreneurs and recommend means to lower the risk of private enterprise based upon cooperation with insurance underwriters, entrepreneurs, State government and others as necessary; (d) continue the implementation and submittal to Congress of an annual report with recommendations on the recreation fee programs of the various Federal recreation agencies per P.L. 92-347, as amended; (e) continue working with the private sector, including the Private Enterprise Recreation Advisory Council, which will serve as a forum for the Bureau concerning presentation, analysis, and guidance of an expanded Federal/private outdoor recreation effort.

B. Legislative Review

The Bureau's support of legislative proposals to provide recreational opportunities and enhance the environment will be high throughout fiscal year 1975, as we move to implement the recommendations of the Nationwide Outdoor Recreation Plan.

The Bureau will continue to review and formulate positions on a wide range of legislative proposals initiated by Executive agencies and Members of Congress which affect outdoor recreation opportunities, environmental enhancement, and natural resource conservation. Existing laws and programs as well as new legislative proposals are carefully scrutinized in the formulation of all Bureau positions.

Under the Legislative Review program, BOR prepares testimonies and support material for use at Congressional hearings on new legislation and makes arrangements for the monitoring of hearings and other Congressional actions that concern the Bureau's responsibilities as the Federal focal point for outdoor recreation.

The Bureau's legislative review program includes providing legislative services to governmental agencies and private interests. The preparation of drafts of proposed legislation, amendatory language, and Congressional testimonies necessitates close coordination with the Department's Legislative Counsel, members of Congress, Congressional Committees and their staffs, governmental offices, and nongovernmental organizations with interests in and responsibilities for outdoor recreation.

C. Recreation Environmental Activities

The National Environmental Policy Act of 1969 (P.L. 91-190), specifically Section 102(C), requires all Federal agencies to: (a) consider the environ-

mental ramifications of proposed program actions; (b) prepare written environmental statements evaluating those proposed actions having major and significant impact; and (c) consult with other agencies having regulatory or enforcement authorities, or special expertise, regarding matters considered in the statements.

The Bureau has special expertise in matters relating to outdoor recreation and the recreation environment.

To achieve improved management of the Bureau's environmental workload, an organizational focal point has been established to: (a) assure uniform high quality and consistent environmental statements prepared within the Bureau; and (b) administratively control Bureau reviews of environmental statements prepared by other Federal agencies to assure quality reviews and to expedite timely, consistent and complete Bureau responses. This small unit provides day-to-day consulting and procedural services to all Bureau programs and acts as liaison with counterpart offices elsewhere in Government.

The Bureau utilizes a multidisciplinary approach to assure identification of actions that might degrade existing or potential outdoor recreation opportunities and associated environmental values. Various Bureau units share the basic responsibility for each Bureau review and coordination is required to assure that simultaneous reviews are undertaken by appropriate field and Washington office staffs.

D. Data Processing and Statistics

The Bureau maintains a central data bank of nationwide recreation information and provides recurring and special tabulations to government and industry for administrative, planning, and research purposes. Outputs consists of tabulations, computer tapes, and analytical runs of resource and socio-economic information contained in the data bank.

In F.Y. 1975, the Bureau plans to: (1) increase the use of remote terminals in BOR and other agency field offices which will enable users to retrieve and update data in the bank directly thus reducing the time required for inquiries and data exchange; (2) expand the use of handprint optical scanning to automate data at the source resulting in minimized errors and reduced costs; and (3) increase the use of available information retrieval and report generator software to reduce programming time and speed up computer inquiries.

E. Program Review and Evaluation

The Bureau will continue to develop and refine methods and procedures for the systematic review and evaluation of recreation programs and projects. Based upon recommendations and findings contained in the Nationwide Plan, the Bureau intends to update its analytical programs in order to more effectively and efficiently determine outdoor recreation priorities.

Highlights of Recent Accomplishments--In preparation for an expanded program with the private sector the Bureau has established the Private Enterprise Recreation Advisory Council: a group of leaders from the private sector who will act as the principal forum for presentation, analysis, and guidance of an expanded Federal/private effort. Members serve on a voluntary basis and assume their expenses in connection with Council activities.

A package describing the Nationwide Outdoor Recreation Plan actions, objectives, responsibilities, and current status of suggested steps to be taken by public

and private agencies is nearing completion. It will serve as a guide in discussion and coordination with the various public and private agencies responsible for the Plan's implementation.

A Digest of Federal Outdoor Recreation Programs and Recreation-Related Environmental Programs was published in F.Y. 1974. It is the most complete inventory of Federal programs relating to outdoor recreation that has been compiled.

The Bureau prepared the final environmental statement pertaining to Departmental implementation of E.O. 11644 concerning use of off-road vehicles on Interior lands. The statement provides for ORV regulations and policies of Interior's four land managing bureaus, including Bureau of Sport Fisheries and Wildlife (BSF&W), National Park Service (NPS), Bureau of Land Managment (BIM), and Bureau of Reclamation (BR), in compliance with Section 102 (2)(C) of the National Environmental Policy Act of 1969.

During calendar year 1973, the Bureau received and reviewed over 2,000 individual environmental impact statements prepared by Federal agencies under the Section 102 (2)(C) provisions of the National Environmental Policy Act. Transportation projects (covering such matters as highways, bridges, and airports) accounted for 43 percent of that workload; water and water-related projects (for example, projects of the Corps of Engineers and the Bureau of Reclamation) accounted for 27 percent; and the remaining 30 percent consisted of other types of actions such as nuclear and coal-fired electric generating facilities, transmission lines, oil and gas pipelines, refuse disposal and sanitation systems, mineral leasing on public lands, and outer continental shelf oil and gas leasing.

The Bureau participated in a number of specialized ad hoc task forces and working groups established to conduct studies and prepare reports or environmental impact statements on projects requiring consideration of land use and outdoor recreation. Examples include: a study of the potential of the outer continental shelf to provide sites for floating nuclear power plants; Federal leasing of coal at a site in southeastern Montana; phosphate mining on a National Forest in Florida; and oil and gas leasing on the outer continental shelf in the Gulf of Mexico.

The BOR Legislative Review program has, in the past year, reviewed and commented on 20 major legislative proposals and 325 bills. Additionally, six statements for Congressional hearings have been prepared.

3. TECHNICAL ASSISTANCE

Technical Assistance: Fiscal year 1974, $1,225,000; fiscal year 1975, $1,390,000; increase, $165,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+ 80,000	+3			Surplus property workload.
(2)	+11,000	--			Within-grade salary costs
(3)	+58,000	--			Share of space services and facilities.
(4)	+16,000	--			E.O. 11739 payraise.
	$+165,000	+3	$1,390,000	62	

Cost Factors Involved in Increases

(1) Annual salaries and related costs of three positions reallocated from Nationwide Planning activities to meet increased surplus property workload, $80,000.

(2) Statutory within-grade salary advancements.

(3) Proportionate share of space rental costs.

(4) Additional one quarter's cost of October 1973 payraise.

Surplus Federal Lands for Parks and Recreation

Need for Increase--The Bureau will increase its priority emphasis on the President's Legacy of Parks program. A high percentage of these lands lie close to urban population concentrations. They can help provide essential public outdoor recreation opportunities with minimum drain on precious energy resources. Conversion of these unutilized and underutilized Federal real properties to park and recreation uses frequently contribute to environmental enhancement in areas which lack opportunities for constructive use of leisure time. The nationwide scope of this activity requires an additional position in three regional offices in FY 1975, to coordinate anticipated complex disposals to States and local governments and to conduct compliance inspections to assure that the government's interests are protected.

Since enactment of P.L. 91-485, amending the Federal Property and Administrative Services Act of 1949, as amended, some 400 surplus Federal real properties totalling more than 60,000 acres and nearly $170 million in value have been announced by the White House for transfer to States and their political subdivisions. The continued emphasis on disposal of Federal surplus property for park purposes will result in approximately 200 conveyances in FY 1975. The Bureau's Regional Office compliance inspection responsibilities will have been increased from 400 properties in 1970 to over 1,000 properties by the end of FY 1975.

In addition, the announced closing of Department of Defense installations will result in increased activities to identify lands suitable for park and recreation purposes and the eventual transfer of portions of these properties to State and local governments.

Enactment of P.L. 92-362 authorizing income-producing uses of conveyed historic properties by State and local entities has stimulated public interest in this program. The Bureau, in carrying out the Secretary's authorities under this law, is attempting to absorb the workload with existing staff. It is estimated that a minimum of 20 surplus property applications will be processed by the Bureau in each of fiscal year 1974 and 1975. This will increase the Bureau's compliance workload from 53 Historic Monument properties in 1973 to over 90 in 1975.

Urban Resource Planning--The increasing urbanization of the Nation requires that priority attention be given to urban recreation problems. Here, Bureau planning assistance can be most effective. The Bureau provides the expertise to assist State and local governments and the private sector to meet recreation needs. Urban recreation needs cannot be met in a timely manner by any single public agency. Federal, State and Local efforts must be coordinated and the private sector encouraged to retain open space and enhance recreation opportunities.

The Bureau acts as a catalyst in assisting communities to develop plans for the use of their recreation resources which will (1) analyze resource constraints; (2) identify recreation and open space potentials; (3) evaluate feasible alternatives for both public outdoor recreation use and the preservation of ecological and open space values; and (4) coordinate the technical and financial assistance available from existing Federal, State, and local programs.

Responsive recommendations will be developed by involving the public in the planning process so that the contributions of those who are most aware of the problems and who must live with and depend on the solutions will be incorporated in the recommendations. Recommended solutions will be generally found through coordinating, combining and maximizing existing Federal, State, local and private sector programs with emphasis on implementation of land use decisions by the lowest effective level of government or private interests; and sharing of costs by those who directly benefit.

General Assistance Programs--The challenge of helping public and private outdoor recreation areas and enterprises meet vital and ever-increasing needs for constructive leisure-time activities is a major Bureau imperative for the year. Under Secretarial directions, the Bureau is (1) seeking to guide Federal, State, and local units of government into providing more outdoor recreation opportunities closer to population concentrations, (2) is working with recreation business and industry to meet essential public needs while reducing energy requirements as far as possible, (3) is assisting non-profit recreation organizations in meeting their responsibilities in a time of energy shortages, (4) is encouraging the recreation/conservation community to exert leadership in instilling the energy conservation ethic which is fundamental to long-range solutions to present energy problems, and (5) is encouraging individuals to satisfy their essential recreation requirements in ways which have least impact on energy supplies.

Proven and valuable program efforts which will continue are: providing information based on the Bureau's clearinghouse file; issuing technical assistance information bulletins and community action guides; publishing a technical assistance periodical for professional park and recreation personnel; and continuing technical assistance liaison with numerous and various governmental and national organizations.

Goals and objectives include followup Regional Office action on these National and/or Regional conferences and workshops: (1) Surfaced Mined Land for Outdoor Recreation; (2) Outdoor Recreation Needs in an Urban Environment; (3) Flood Plain Management for Outdoor Recreation and Open Space; (4) Innovative Techniques for Conserving Recreation and Open Space; (5) the Roles of the Private Sector in Outdoor Recreation; and (6) Financing Outdoor Recreation.

New or expanded activities relating to technical assistance goals and objectives include: (1) added emphasis on the Bureau's Technical Assistance Clearinghouse Information and Data System; (2) involvement of Regional Offices for followup action in Departmental support of the President's Economic Adjustment Committee activities in response to announced closings of Department of Defense installations; and (3) encouragement of special studies by colleges, universities, State Governments and the private sector responsive to identified outdoor recreation societal and resource needs, problems and opportunities. Studies needed include: leisure market and its relationship to economic growth; air and water quality standards in outdoor recreation; and implications of national land use planning on outdoor recreation.

Highlights of Recent Accomplishments--During the past year the Bureau has assisted State, local and regional planning agencies in analyzing outdoor recreation and open space problems in a number of urban areas across the country. Printed reports resulting from the Bureau efforts have been completed for the Baltimore urban region; the Chattahoochee River corridor, Atlanta; and for the Santa Monica Mountains, Los Angeles. Ongoing urban assistance efforts are being conducted in each of the Bureau's Regional Offices as requested by local and regional interests.

Personnel Summary

	1973 Actual	1974 Estimate	1975 Estimate
Direct:			
Total number of permanent positions -------	219	219	219
Full-time equivalent of other positions ---	6	7	17
Average paid employment -------------------	205	221	221
Average GS grade -------------------------	9.4	9.3	9.3
Average GS salary ------------------------	$15,588	$16,074	$16,074

ITEMIZATION OF ESTIMATE

Department of the Interior
Appropriation Title:
Salaries and Expenses — Bureau of Outdoor Recreation

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) or Decrease (-)
Program and Financing:				
Total direct obligations -----	4,208,457	4,728,000	5,040,000	+312,000
Unobligated balance lapsing --	13,543	--	--	--
Appropriations ----------------	4,222,000	4,728,000	5,040,000	+312,000
Direct Obligations by Objects:				
11.0 Personnel compensation ----	3,136,000	3,510,000	3,601,000	+91,000
12.1 Personnel benefits: Civilian ----------	324,000	377,000	384,000	+7,000
21.0 Travel and transportation of persons----------	211,000	234,000	234,000	--
22.0 Transportation of things --	42,000	26,000	26,000	--
23.0 Rent, communications and utilities ----------	69,000	90,000	304,000	+214,000
24.0 Printing and reproduction ----------	144,000	169,000	169,000	--
25.0 Other services ----------	199,457	227,000	227,000	--
26.0 Supplies and materials ----	53,000	60,000	60,000	--
31.0 Equipment ----------	30,000	34,000	34,000	--
42.0 Insurance claims and indemnities ----------	0	1,000	1,000	--
Total direct obligations ---	4,208,457	4,728,000	5,040,000	+312,000

DEPARTMENT OF THE INTERIOR

BUREAU OF OUTDOOR RECREATION

Land and Water Conservation Fund

Appropriation, 1974		$ 76,223,000
Transferred to GSA for space rental		-28,000
Contract authority		30,000,000
Contract authority, unobligated balance lapsing		-30,000,000
Unobligated balance from F.Y. 1973		248,567,804
Total available for obligation, 1974		324,762,804
Decreases:		
Assistance to States		
Appropriation, 1974	$ 66,000,000	
Unobligated balance from F.Y. 1973	136,092,663	
Less: Payraise adjustment	-252,000	
Subtotal	201,840,663	
Federal Programs		
Appropriation, 1974	5,000,000	
Unobligated balance from F.Y. 1973	112,475,141	
Less: Payraise adjustment	-126,000	
Subtotal	117,349,141	319,189,804
Subtotal		5,573,000
Increases:		
Assistance to States		
Appropriation, 1975	196,000,000	
Unobligated balance from F.Y. 1974	14,840,663	
Subtotal	210,840,663	
Federal Programs		
Appropriation, 1975	97,500,000	
Unobligated balance from F.Y. 1974	-0-	
Subtotal	97,500,000	
Administration Expenses: appropriation	927,000	309,267,663
Total available for obligation, 1975		314,840,663
Less: Unobligated balance from F.Y. 1974		-14,840,663
Budget estimate, 1975		300,000,000

BUREAU OF OUTDOOR RECREATION
LAND AND WATER CONSERVATION

Analysis by Activities

Activity	Amount Available 1974	Fiscal Year 1975 Estimated Total Available	Fiscal Year 1975 Unobligated Balance From 1974	Fiscal Year 1975 Budget Estimate	Total Available 1975 Compared to Total Available 1974
1. Assistance to States -------	$201,840,663	$210,840,663	$ 14,840,663	$196,000,000	$ +9,000,000
2. Federal Programs ----------	117,349,141	97,500,000	--	97,500,000	-19,849,141
3. Administrative Expenses ----	5,573,000	6,500,000	--	6,500,000	+927,000
Total	324,762,804	314,840,663	14,840,663	300,000,000	-9,922,141

1. Assistance to States--$196,000,000

Funds requested in 1975 together with all unobligated carryover balances will be used for grants-in-aid to States to finance up to 50 percent of the cost of preparing and maintaining outdoor recreation plans, acquiring land and water areas, and developing areas for outdoor recreation purposes.

2. Federal Programs--$97,500,000

Funds requested in 1975 will provide for the acquisition of additional land and water areas by the National Park Service ($71,500,000); Forest Service ($17,000,000); Bureau of Sport Fisheries and Wildlife ($8,500,000); and the Bureau of Land Management ($500,000).

3. Administrative Expenses--$6,500,000

Funds requested in 1975 will finance the cost of administering the Federal and State programs of the Land and Water Conservation Fund Act.

1. ASSISTANCE TO STATES

A. Assistance to States: Fiscal year 1974, $66,000,000; fiscal year 1975, $196,000,000; increase $130,000,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+130,000,000	--	$196,000,000		To reestablish a program level commensurate with States' ability to acquire and develop recreation areas and facilities at a sustained rate to keep pace with the Nation's needs.
	$+130,000,000	--	$196,000,000	--	

Cost Factors Involved in Increases

(1) Payments to States for outdoor recreation planning, acquisition or development projects in accordance with the purposes of the Land ans Water Conservation Fund Act, $130,000,000.

Need for Increase--(1) The fiscal year 1975 request of $196,000,000 represents an increase of $130,000,000 over the previous fiscal year 1974 appropriation of $66,000,000. This increase is needed to reestablish a program level commensurate with the States' ability to obligate Fund monies at a sustained rate for the orderly and effective acquisition and development of recreation areas and facilities under the Land and Water Conservation Fund authority. Reestablishment of such a program level is essential if acquisition and development of State and local land and facilities for park and recreation purposes is to keep pace with the Nation's needs. The combination of the termination of the HUD Open Space program and the uncertainies growing out of Congressional consideration of special revenue sharing has added further pressure on the Land and Water Conservation Fund. The upcoming Bicentennial celebration may well stimulate State activities to create and develop parks and open space at all levels of government with Land and Water Conservation funds.

In light of the national energy crisis, the Bureau is urging the States to accord priority funding to: (a) acquisition of land located along public transportation corridors, within walking distance of primary user groups, and accessible by non-motorized vehicles and public transit; and (b) gear development funds to projects which provide low energy-consumptive recreation activities, such as bicycling and hiking, and to urban-oriented day-use projects, such as tennis courts, swimming pools, playgrounds and ball fields.

The fiscal year 1974 program was funded at the reduced appropriation level of $66 million to allow the States an opportunity to reduce large carryover balances from previous Land and Water Conservation Fund apportionments. It was estimated that the States would have $128.2 million in carryover at the end of fiscal year 1973; actual carryover was $135.8 million. This carryover together with the $66 million provides an availability of $201.8 million for obligation in fiscal year 1974. It is now estimated that only $15 million of this amount will remain unobligated for carryover into the fiscal year 1975 program as shown on the table below:

Carryover Balance July 1, 1973	Budget Authority FY 1974	Estimated Obligations FY 1974	Estimated Carryover July 1, 1974	Requested Budget Authority FY 1975
$135.8 million	$66.0 million	$187.0 million	$14.8 million	$196.0 million

The small carryover balance in combination with the requested $196.0 million for fiscal year 1975 is well within the capability of the States to obligate; $192.0 million was obligated by the States in fiscal year 1972 and $212.1 million was obligated in the fiscal year 1973 program.

Under this program, Federal dollars are matched with an equal or larger amount of State or local money to finance the acquisition and/or development of outdoor recreation areas and facilities. As required by the Land and Water Conservation Fund Act, all projects must be in accord with the Comprehensive Statewide Outdoor Recreation Plan prepared by the State and approved by the Bureau of Outdoor Recreation. This requirement establishes an orderly approach to resolving the outdoor recreation needs at the State and local levels. Without exception the State plans indicate a growing need to provide more recreation opportunities and a lack of State and local funds sufficient to do the whole job.

Through F.Y. 1974, approximately $1,005,645,000 will have been appropriated on a 50-50 matching basis for State purposes and more than 13,000 individual grant projects approved by the Bureau of Outdoor Recreation. The F.Y. 1975 appropriations request of $196,000,000 is geared to an ongoing program effort which the States can obligate at present staffing levels without creating large future carryovers of idle public funds.

Highlights of Recent Accomplishments--Through the program of State grants, the Nation's publicly owned outdoor recreation estate has been increased by 134,000 acres at the State and local level during F.Y. 1973. In the same period $126 million in Federal grants matched by an equal amount of non-Federal monies was obligated for the development of outdoor recreation facilities.

ESTIMATED FISCAL YEAR 1975 APPORTIONMENT OF $196,000,000

State	Apportionment	State	Apportionment
Alabama	$ 3,201,660	New Hampshire	$ 1,848,280
Alaska	1,700,300	New Jersey	5,838,840
Arizona	2,519,580	New Mexico	1,963,920
Arkansas	2,315,740	New York	12,230,400
California	13,575,940	North Carolina	3,716,160
Colorado	2,731,260	North Dakota	1,768,900
Connecticut	3,280,060	Ohio	7,435,260
Delaware	1,859,060	Oklahoma	2,733,220
Florida	5,369,420	Oregon	2,597,980
Georgia	3,653,440	Pennsylvania	8,145,760
Hawaii	2,001,160	Rhode Island	2,112,880
Idaho	1,813,000	South Carolina	2,710,680
Illinois	7,755,720	South Dakota	1,790,460
Indiana	4,137,560	Tennessee	3,336,900
Iowa	2,716,560	Texas	7,607,740
Kansas	2,532,320	Utah	2,147,180
Kentucky	2,921,380	Vermont	1,697,360
Louisiana	3,324,160	Virginia	3,856,300
Maine	1,923,740	Washington	3,381,000
Maryland	3,807,300	West Virginia	2,283,400
Massachusetts	4,827,480	Wisconsin	3,688,720
Michigan	6,459,180	Wyoming	1,662,080
Minnesota	3,390,800	District of Columbia	782,360
Mississippi	2,335,340	Puerto Rico	1,492,860
Missouri	3,917,060	Virgin Islands	72,640
Montana	1,826,720	Guam	78,520
Nebraska	2,206,960	American Samoa	60,880
Nevada	1,841,420		

Apportioned to States	$ 186,985,000
Contingency	9,015,000
Total Appropriated	$ 196,000,000

2. FEDERAL PROGRAMS

Analysis by Subactivities

Activity	Amount Available 1974	Fiscal Year 1975 Estimated Total Available	Fiscal Year 1975 Unobligated Balance from 1974	Fiscal Year 1975 Budget Estimate	Total Available 1975 Compared to Total Available 1974
1. National Park Service ---	$ 80,524,819	$ 71,500,000	$ --	$ 71,500,000	$ -9,024,819
2. Forest Service ----------	32,516,722	17,000,000	--	17,000,000	-15,516,722
3. Bureau of Sport Fisheries and Wildlife ----	2,644,667	8,500,000	--	8,500,000	+5,855,333
4. Bureau of Land Management ----------	1,194,578	500,000	--	500,000	-694,578
5. Redwoods Acquisition ----	468,355	--	--	--	-468,355
Total Federal Programs--	117,349,141	97,500,000	--	97,500,000	-19,849,141

2. FEDERAL PROGRAMS

Federal Programs: Fiscal year 1974, $5,000,000; fiscal year 1975, $97,500,000; increase, $92,500,000. The amount requested is distributed as follows:

	Fiscal Year 1974	Fiscal Year 1975	Increase (+) or Decrease (-)
National Park Service	$1,000,000	$71,500,000	$+70,500,000
Forest Service	4,000,000	17,000,000	+13,000,000
Bureau of Sport Fisheries and Wildlife	--	8,500,000	8,500,000
Bureau of Land Management	--	500,000	500,000
Total	$5,000,000	$97,500,000	$+92,500,000

Need for Funds Requested--The funds requested are for the acquisition of land and water recreation areas of national and regional significance. The large unobligated carryover which was available for acquisition in F.Y. 1974 will have been utilized by the beginning of F.Y. 1975. In developing the F.Y. 1975 program consideration was given to the energy requirements of reaching public outdoor recreation facilities. Recognizing these energy requirements, funds are programmed to acquire areas within reasonable access of major population centers and to continue an acquisition program of needed land and waters which provide a base for outdoor recreation opportunities. Funds are also recommended for the preservation of outstanding resources and certain species of rare and endangered wildlife. The requested funds are necessary to maintain viable acquisition programs and to preserve key properties for public recreation use and enjoyment.

National Park Service

The request of $71.5 million is an increase of $70.5 million over the F.Y. 1974 appropriations of $1 million. Program emphasis has been placed on speedy acquisition of lands in newly authorized areas to prevent further price escalation. In addition, funds are requested for acquisition of lands within older areas of the National Park System in order to complete the acquisition of these areas before escalating prices or incompatible uses make the acquisition unfeasible. The program requested is as follows:

National Park Service--$71,500,000
Land and Water Conservation Fund
Fiscal Year 1975 Program

Recently Authorized Areas:	Total Costs
Bighorn Canyon	$ 447,000
Biscayne	1,000,000
Buffalo River	7,000,000
Capitol Reef	375,000
C&O Canal	7,190,000
Cowpens	1,000,000
Cumberland Island	9,925,000
Delaware Water Gap	4,183,000
Effigy Mounds	13,000
Fort Donelson	150,000
Golden Gate	10,000,000
Gulf Islands	342,000
Lincoln Home	500,000
Minute Man	3,000,000
Muir Woods	400,000

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Recently Authorized Areas: (continued)	Total Costs
Perry's Victory	$ 250,000
Piscataway Park	825,000
Sleeping Bear Dunes	1,150,000
Subtotal	$47,750,000
Wild and Scenic Rivers:	
Lower St. Croix	$ 1,450,000
Upper St. Croix	800,000
Subtotal	$ 2,250,000
Deficiency Awards:	$ 1,500,000
Inholdings:	$20,000,000
Grand Total	$71,500,000

Recently Authorized Areas--The F.Y. 1975 request includes $47,750,000 for the acquisition of National Park Service newly authorized areas. This includes a request of $10,000,000 for Golden Gate and $4,183,000 for the Delaware Water Gap NRA. In addition, funds are requested where needed to replace those moneys reprogrammed into Delaware Water Gap NRA and Golden Gate NRA in F.Y. 1974. This includes funds requested for Bighorn Canyon, Biscayne, the C & O Canal, Lincoln Home, Minute Man, and Upper St. Croix Wild and Scenic River. In addition the program also includes line item appropriations for other areas authorized prior to 1960, where major amendatory legislation has passed since 1960. These areas include Capitol Reef, Cowpens, Fort Donelson, Muir Woods, and Perry's Victory.

Inholdings--The 1975 request includes $20,000,000 for unidentified inholdings in areas authorized prior to 1960. This proposed program represents an acceleration of acquisitions within the older areas of the National Park System. It will give major emphasis to the rapid acquisition of the remaining private lands within the boundaries of older National Park Service areas.

Deficiency Awards--Funds are needed on a continuing basis to satisfy court awards in excess of deposits, thus preventing excessive interest costs. The funds requested for deficiencies will also permit payment of administrative costs generated by court actions, i.e., additional appraisal or title work.

Forest Service

The request of $17,000,000, an increase of $13,000,000 over the F.Y. 1974 appropriation, includes substantial funds for acquisition of authorized areas. Minimal appropriations are requested for the acquisition of lands within specially designated recreation areas. The request for F.Y. 1975 will be distributed as follows:

Forest Service--$17,000,000
Land and Water Conservation Fund
Fiscal Year 1975 Program

National Recreation Areas:	Total Cost
Whiskeytown-Shasta-Trinity NRA	$ 550,000
Sawtooth NRA	2,000,000
Oregon Dunes NRA	800,000
Flaming Gorge NRA	250,000
Mt. Rogers NRA	1,100,000
Spruce Knob-Seneca Rocks NRA	1,100,000
Appalachian Trail	3,550,000

Forest Service--$17,000,000
Land and Water Conservation Fund
Fiscal Year 1975 Program (continued)

Wilderness and Primitive Areas	$ 2,000,000
Specially Designated Recreation Areas	4,650,000
Deficiency Awards and Inholdings	1,000,000
Total, Forest Service	$17,000,000

The proposed funding schedule provides for acquisition of key recreational lands in the Forest Service administered National Recreation Areas as well as Wilderness and Primitive Areas. In addition, funds are requested for the continuation of acquisition along the Appalachian Trail so the the program impetus giving this area in F.Y. 1973 and continued in F.Y. 1974 can be maintained.

A minimal amount of funds have been requested for the acquisition of lands within specially designated recreation areas. The $4,650,000 requested for this program will provide for the acquisition of some of the key recreation lands in the Nation. This is consistent with the higher priority placed upon acquisition of lands within congressionally authorized areas.

In addition, this request includes $1,000,000 for the payment of deficiency awards and the acquisition of small key tracts not falling within the congressionally authorized or specially designated recreation areas. These funds will primarily be used to pay deficiency awards in excess of deposits in condemnation cases. They are needed on a continuing basis to satisfy court awards thus preventing increased interest cost. Availability of such funds permits payment of administrative cost generated by court actions, i.e., additional appraisals or title work. Some may be used to acquire small tracts of land which have high recreation value but are not part of a larger acquisition area.

Bureau of Sport Fisheries and Wildlife

The F.Y. 1975 request includes $8,500,000 for acquisition of lands to be administered by the Bureau of Sport Fisheries and Wildlife. No appropriation was made to BSF&W from the L&WCF in F.Y. 1974. The BSF&W program request for F.Y. 1975 contains the following elements:

Bureau of Sport Fisheries and Wildlife--$8,500,000
Land and Water Conservation Fund
Fiscal Year 1975 Program

Special Legislation:	Total Costs
San Francisco Bay NWR	$6,000,000
Tinicum Environmental Center	200,000
Endangered Species:	1,300,000
Recreation Additions:	
National Elk NWR	750,000
Mason Neck NWR	250,000
Total, Bureau of Sport Fisheries and Wildlife --	$8,500,000

The $6,000,000 requested for acquisition at the South San Francisco Bay National Wildlife Refuge and the $200,000 requested for acquisition at the Tinicum Environmental Center would permit the Bureau of Sport Fisheries and Wildlife to

take significant steps in acquiring these areas recently authorized by Congress.

A total of $1,300,000 is requested for the acquisition of lands to protect and preserve endangered species. The recent enactment of the Endangered Species Act of 1973, removed the ceiling on the acquisition of funds for the protection of endangered species. These funds are critically needed if certain species are going to be preserved.

Funds are also requested to acquire lands under the recently enacted P.L. 92-534. This Act authorizes the Bureau of Sport Fisheries and Wildlife to acquire lands for wildlife oriented recreation development at existing refuges. A total of $1,000,000 is requested for acquisition under this Act. This includes $750,000 for acquisition at the National Elk NWR in Wyoming and $250,000 for Mason Neck NWR in Virginia.

Bureau of Land Management

The F.Y. 1975 request is $500,000; no funds were appropriated from the Land and Water Conservation Fund for Bureau of Land Management in F.Y. 1974. The request includes $445,000 for acquisition at King Range NCA in California. This funding should be sufficient to complete the acquisition of this newly authorized area. In addition, $55,000 is requested for acquisition along the Pacific Crest Trail.

The Redwood National Park

The Bureau, as the Department's representative in carrying out the land acquisition negotiations with the four major timber companies whose lands were legislatively taken for the Redwood National Park (P.L. 90-545), is continuing its efforts to negotiate settlements with the representatives of the four companies.

All the companies have been paid in cash or cash and kind (Northern Redwood Purchase Unit land) in the amount equal to the Government's appraisal.

Agreement has been reached with Simpson Timber Company on all matters except the amount of severance. The amount of severance is pending agreement by the National Park Service and Simpson Timber Company on the use of roads for log-hauling purposes and other forest management activities, the disposal of personal property, and the buffer area.

Two of the companies - Georgia-Pacific Corporation and Arcata National Corporation - have filed petitions with the Court of Claims for a determination of the amount of just compensation due to them. The trial hearing the Arcata case was held during the entire month of May in San Francisco, California. A decision by the Court on the value of these lands is expected in early 1974. A second trial may be needed to resolve the severance matter.

The Georgia-Pacific Corporation case is scheduled for Court action in March or April 1974.

Negotiations are continuing with Harold A. Miller, et al; (Miller-Rellim Redwood Company), in an attempt to reach overall agreement. Should negotiations fail and agreement cannot be reached, only Miller can request the Court to determine the value. Petition must be filed in the Court by Miller prior to October 2, 1974.

The Department is currently negotiating with the companies regarding the timber harvesting practices in the "buffer areas" adjacent to the Redwood National Park and the disposal of personal property. The modification of the timber harvesting may result in increased logging costs to the companies. These additional costs may be part of the severance claims made by the four major timber companies. The amount of severance is dependent on the agreements reached on the buffer areas, the use of roads in the Park for log-hauling purposes, and the disposal of personal property.

3. ADMINISTRATIVE EXPENSES

Administrative Expenses: Fiscal year 1974, $5,601,000; fiscal year 1975, $6,500,000; $899,000. The increase consists of:

Increase (+) or Decrease (-)		Total	Total	
Amount	Positions	Program	Positions	Explanation
(1) $+200,000	+8 M.Y. (-0- Perm.)			Increased grant workload.
(2) +24,000				Grant audit assessment.
(3) +125,000	--			Automation of grant data and microfilm record system.
(4) +16,000	--			Bureau of Employees Compensation payment.
(5) +55,000	--			E.O. 11739 payraise.
(6) +40,000	--			Within-grade salary cost.
(7) -28,000	--			Rent transfer to GSA.
(8) +467,000	--			Reimbursement for space, services & facilities provided by GSA in accordance with Public Buildings Amendments of 1972 P.L.92-313
$+899,000	+8 M.Y. (-0- Perm.)	$6,500,000	296	

Cost Factors Involved in Increases

(1) Annual salaries and related costs to annualize the equivalent of eight permanent positions authorized in a prior fiscal year, $200,000.

(2) Additional funds for support of on-site financial record audits of grant assistance projects by Office of Survey and Review, Department of the Interior, $24,000.

(3) Funds for expansion of the Bureau's micro-film project filing and automatic data processing systems, $125,000.

(4) Funds for transfer to Bureau of Employee Compensation to cover expenses associated with on-the-job injury, $16,000.

(5) Additional one quarter's cost of October 1973 payraise.

(6) Statutory within-grade salary advancements.

(7) Rent transfer to GSA.

(8) Proportionate share of space rental costs.

A. Assistance to States

In fiscal year 1975, no additional new positions are requested. Additional funds in the amount of $200,000 are required for salaries and related benefits, travel and other necessary supportive costs to annualize the equivalent of eight permanent positions authorized in a prior fiscal year. These positions are administratively assigned to the Assistance to States program area.

States have demonstrated their ability to sustain an annual obligation rate commensurate with the fiscal year funding request of $196.0 million. The Bureau's workload in grants administration has increased accordingly. An additional eight man years of effort will be required in the Bureau's regional offices to handle the volume of new projects, some 2,500 annually, and to carry out compliance responsibilities required by the Act for the more than 11,500 projects already approved under the grants-in-aid program.

The added grants workload and an attendant increase in the complexity of the program resulting from recent Federal legislation require greater technical assistance to the States to strengthen program administration at the grass-roots level. Program reviews on a more frequent and direct basis are necessary to assure compliance not only with the Fund Act, but also other Federal laws and new administrative procedures designed to create greater uniformity among categorical grant programs. The Bureau has also implemented a number of innovative changes to streamline the grants programs. These include further delegations to its field offices, increased responsibility to the States for program administration, new project submission options and an option combining continuing plan eligibility with an ongoing planning process for the more progressive States. Although these procedures have decreased the flow of paperwork and allowed the Bureau the opportunity to strengthen the grants-in-aid program in other ways, the continual increase in the number of complexity of projects will require additional manpower.

Great demands have also been placed on the Bureau's manpower to implement fully the National Environmental Policy Act of 1969 and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. Close coordination is required with the States to gather and assess data relating to the impact on the environment of new grant projects. Formal environmental assessments are made for all projects and it is estimated that a minimum of 40-50 projects annually will require a full impact statement. Similarly, as more recreation areas and facilities are proposed by the States in urban situations, close to where people live, work and play, more projects are affected by relocation assistance. The detailed procedures now in effect to assure that States offer sellers fair market value for their land and relocation benefits require more assistance from the Bureau. States must be aided in establishing uniform procedures, and program services must be strengthened to review their performance under this legislation.

In response to strong and explicit requests from the States, the Bureau also intends to increase its activities with regard to the State planning effort. The Bureau plans to expand its assistance role to include (1) coordinating Federal input to State plans, (2) participation in regional and local planning meetings, and (3) short-term direct assistance as needed in the State planning effort. This expanded Bureau planning effort will not only improve the quality of outdoor recreation plans, but will also place the States in a more favorable position to cope with other resources and land use planning which would be required by various bills now under consideration in the Congress.

Grant Audit Increase--An increase of $24,000 is required for transfer to the Department's Office of Survey and Review. Additional funds have been requested by that office to allow them to continue performing the necessary audits of grant projects. The complexity of these audits has increased markedly in recent years due in part to additional compliance aspects of grant agreements. More and more States are using indirect cost rates according to OMB Circular A-87 which must be resolved either provisionally or finally by on-site audit. OMB Circular A-102, Standards for Grantee Financial Management Systems and A-103, Uniform Relocation Assistance also require a heavy audit workload to assure compliance. Audit frequency varies for each State between one and three years depending on particular audit problems and priorities. In F.Y. 1975 approximately 36 States will have grant projects audited.

Automation of Grant Records and Microfilm Record System--An increase of $125,000 is also requested to support a system of expanded Automatic Data Processing (ADP) and a micro-film project filing system. The expanded ADP system will provide the data necessary for analysis of the State grants-in-aid program, for financial statements and budget preparation. It will also provide the information needed to respond to inquiries on status of projects and will provide aggregated data needed to respond to inquiries by the general public and the many governmental agencies having recreation and conservation responsibilities. It will serve also as a source of statistical information for outdoor recreation and environmental planning by other Federal agencies, States, river basin commissions, regional planning agencies, and municipal and local levels of government.

The micro-film system will replace the cumbersome and space-consuming project file systems now used in the Bureau's Washington and seven Regional Offices. With over 11,500 projects now on file and an expected addition of 2,500 or more projects annually for the authorized life of the program (to 1989), space needs will increase fourfold. The cost of additional floor space and filing equipment needed for the present method of filing will far outweigh the cost of the micro-filming equipment with its attendant space saving.

B. Federal Programs

Program Direction--No additional positions are being requested for the administration of the Federal land acquisition program for F.Y. 1975. The Federal land acquisition program of the Land and Water Conservation Fund will continue to be coordinated through the Bureau's seven Regional Offices with a small policy and liaison staff in Washington. Greater reliance will be placed on composite and management unit reviews accomplished cooperative with the acquisition agencies. This program will rely heavily on acquisition planning rather than individual tract reviews, in the future. A policy level committee comprised of representatives of the acquisition agencies and the Bureau is being established to enhance coordination.

Program Status--Over 1,200,000 acres of Federal recreation lands have been acquired with L&WCF monies through July 1973, at a cost of approximately $568,000,000. These accomplishments can be summarized by agency as follows:

Acquisition Through July 31, 1973

Agency	Acres	Cost
Bureau of Land Management	2,937	$ 1,313,000
Forest Service	726,050	136,195,000
National Park Service	446,117	413,066,000 1/
Bureau of Sport Fisheries and Wildlife	37,804	17,015,000
Total	1,212,908	$567,589,000

1/ Includes Redwood National Park acquisitions.

The acquisitions under the Fund represent high priority lands acquired to serve recognized national outdoor recreation needs. Program emphasis has been directed toward completion of acquisition in newly authorized areas to offset the rapid escalation in land values which normally occurs. Key lands have been acquired in national forests, national wildlife refuges and areas administered by the National Park Service to assure preservation of nationally important scenic and historic sites, to preserve habitat for rare or endangered species, and to provide additional recreation opportunities.

Personnel Summary

	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions	296	296	296
Full-time equivalent of other positions	8	9	20
Average paid employment	249	253	261
Average GS grade	9.4	9.3	9.3
Average GS salary	$15,588	$16,074	$16,074

ITEMIZATION OF ESTIMATE

Department of the Interior
Appropriation Title:
Land and Water Conservation — Bureau of Outdoor Recreation

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) or Decrease (-)
Program and Financing:				
Total obligation	303,220,565	309,922,141	300,000,000	-9,922,141
Unobligated balance lapsing:				
Appropriation	24,933	--	--	--
Contract authority	30,000,000	30,000,000	30,000,000	--
Transferred to GSA	19,501	28,000	--	-28,000
Unobligated balance available, start of year (-)	-251,832,803	-248,567,804	-14,840,663	-233,727,141
Unobligated balance available, end of year (+)	248,567,804	14,840,663	14,840,663	--
Appropriation	300,000,000	76,223,000	300,000,000	+223,777,000
Contract authority	30,000,000	30,000,000	30,000,000	--
Obligations by Objects BUREAU OF OUTDOOR RECREATION				
11.0 Personnel compensation	3,838,000	4,060,000	4,240,000	+180,000
12.1 Personnel benefits: Civilian	361,000	363,000	405,000	+42,000
13.0 Benefits for former personnel	5,000	--	--	--
21.0 Travel and transportation of persons	200,000	235,000	259,000	+24,000
22.0 Transportation of things	24,000	11,000	23,000	+12,000
23.0 Rent, communications, and utilities	212,000	217,000	763,000	+546,000
24.0 Printing and reproduction	112,000	122,000	126,000	+4,000
25.0 Other services	537,544	913,355	486,000	-427,355
26.0 Supplies and materials	47,000	60,000	75,000	+15,000
31.0 Equipment	58,000	57,000	104,000	+47,000
41.0 Grants, subsidies & contributions	212,075,046	187,000,000	196,000,000	+9,000,000
42.0 Insurance claims & indemnities	1,000	3,000	19,000	+16,000
Total, Bureau of Outdoor Recreation	217,470,590	193,041,355	202,500,000	+9,458,645

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) or Decrease (-)
Obligations by Objects: (Cont.)				
ALLOCATION ACCOUNTS				
11.0 Personnel compensation	8,054,000	7,917,000	8,656,000	+739,000
12.1 Personnel benefits: Civilian	772,000	776,000	846,000	+70,000
21.0 Travel and transportation of persons	329,000	662,000	717,000	+55,000
22.0 Transportation of things	161,000	169,000	177,000	+8,000
23.0 Rent, communications, and utilities	218,000	288,000	297,000	+9,000
24.0 Printing and reproduction	44,000	68,000	89,000	+21,000
25.0 Other services	4,389,975	4,985,786	6,119,000	+1,133,214
26.0 Supplies and materials	244,000	120,000	183,000	+63,000
31.0 Equipment	391,000	54,000	120,000	+66,000
32.0 Lands and structures	70,146,000	99,668,000	78,005,000	-21,663,000
41.0 Grants, subsidies & contributions	1,004,000	2,176,000	2,294,000	+118,000
42.0 Insurance claims & indemnities	1,000	1,000	1,000	--
Subtotal	85,753,975	116,884,786	97,504,000	-19,380,786
95.0 Quarters & subsistence charges	-4,000	-4,000	-4,000	--
Total, Allocation Accounts	85,749,975	116,880,786	97,500,000	-19,380,786
Total obligations	303,220,565	309,922,141	300,000,000	-9,922,141
Obligations are Distributed as Follows:				
Bureau of Outdoor recreation	217,470,590	193,041,355	202,500,000	+9,458,645
National Park Service	53,231,508	80,524,819	71,500,000	-9,024,819
Bureau of Sport Fisheries and Wildlife	4,141,817	2,644,667	17,000,000	+14,355,333
Forest Service	27,560,637	32,516,722	8,500,000	-24,016,722
Bureau of Land Management	816,013	1,194,578	500,000	-694,578

DEPARTMENT OF THE INTERIOR

BUREAU OF SPORT FISHERIES AND WILDLIFE

RESOURCE MANAGEMENT

Highlight Statement

The purpose of the resource management program is the perpetuation of the nation's sportfish and wildlife resources and their use and enjoyment by the American people. This is achieved through habitat protection; protection and management of fishery and wildlife resources, including endangered species; and interpretation of the role and significance of fish and wildlife for the public--all conducted in cooperation with the States and private organizations.

The 1974 appropriation reflected intensified refuge management, reduction of non-wildlife oriented recreation, and expanded comprehensive river basin studies. Also provided were increased animal damage control operations and research; closer coordination of the national migratory bird programs; stricter law enforcement, including surveillance of wildlife species at ports of entry; concerted efforts in protecting and perpetuating marine mammals; and emphasis on anadromous and inland fisheries production.

The Bureau FY 1975 request contains the base for a major thrust called biological services. This effort will constitute more than a mere incremental addition to current Bureau programs; it is a proposed determined attempt to shift emphasis and direction into new areas. Basically, it is a concept to provide environmental input to major natural resource decisions. To activate this concept, the Bureau must provide a product--biological information, by means of a delivery system--technical assistance.

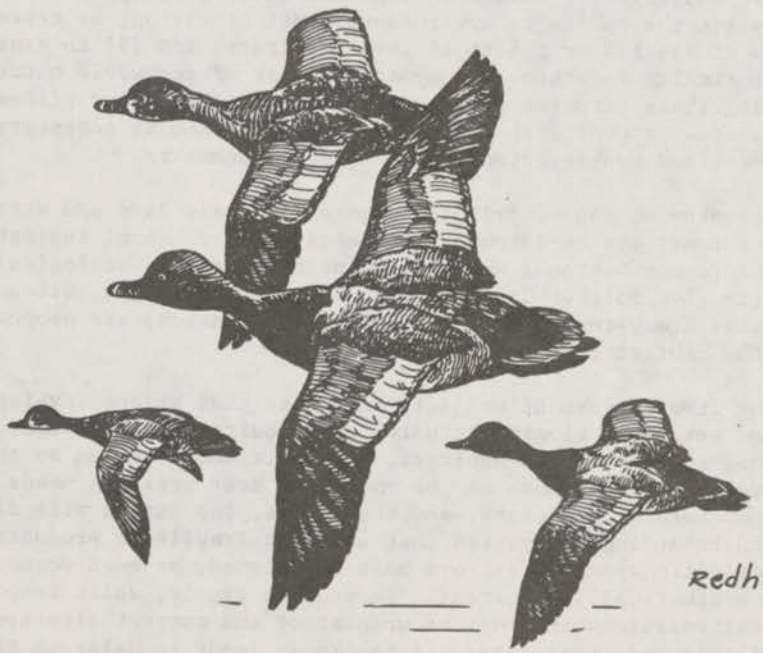
The primary purpose of biological services are: (1) to assure recognition and protection of fish and wildlife values in land and water development decisions and actions; (2) to alert the public to environmental deterioration, as represented by abnormal dynamics of species or health of their habitats; and (3) to assist in providing the opportunity for future enjoyment and use of renewable natural resources. Meeting these purposes requires that interrelated disciplines be marshalled to provide whatever fish and wildlife information is necessary to resource development and conservation agencies' decisionmakers.

To focus on how government can contribute to more rationale land and water use decisions, three support system/inventory projects (Environmental Indicators, Information Transfer, and National Wetland Inventory) and five ecological assessment projects (Low Sulphur Coal and Oil Shale, Power Plants, Stream Alterations, Coastal Ecosystems, and Western Water Allocation) are proposed and discussed under the habitat preservation activity.

In particular, the five assessment projects emphasize that before developing the nation's lands and waters, ecological studies are required to understand basic relationships among species, their habitats, and their worth to man so that the best possible development decisions can be made. To meet pressing needs of planners, decisionmakers, technicians, and the public, the Bureau will direct actions toward understanding ecosystems that are most fragile or productive, and toward fish and wildlife species that are most threatened, or most economically, ecologically, or aesthetically important. To provide timely, valid responses, basic environmental relationships must be understood and current site-specific data must be available and interpreted. A breakdown leads to delay in providing information, and inadequate information results in poor decisionmaking. The history of the Alaska pipeline clearly demonstrates how environmental concern can delay project implementation when early consideration is not given to adverse effects on the ecosystem. Thus, it is imperative that informed environmental concern be given in the formative and developmental stages, rather than just prior to implementation.

The estimates also provide for the operation of ten new refuges; upgrading Alaska wildlife programs; rehabilitating wildlife refuge facilities; expanding marine mammal research; increasing animal damage control activities through grants-in-aid to States; operating three new hatcheries, increasing production at one hatchery and operating a new fishway; increasing protection of endangered and threatened species, marine mammals, and other wildlife; planning for implementation of the Endangered Species Act of 1973; accommodating GSA space costs as required by PL 92-3313; and annualizing the costs of the October 1973 pay increase. The estimates also provide for a decrease in funding due to completion of field work related to the Wilderness Act.

There is also included as a budget amendment $800,000 for the accelerated energy research and development program. These funds will be used to improve the assessments of the impact of proposed coal and oil shale development on the environment, as represented by fish and wildlife resources; to formulate impact of future development; and make recommendations for improved restoration of the disrupted area.



Redhead Ducks

Appropriation, 1973	$73,489,500	
Wageboard pay supplemental	900,000	
Total appropriation, 1973		$74,389,500
Transferred to Operating Expenses, Public Building Service, General Services Administration		-176,739
Former General Administrative Expenses appropriation merged with this account		2,250,000
Total available, 1973		76,462,761
Appropriation, 1974	80,437,000	
Supplemental appropriation to monitor construction of Alaska pipeline	450,000	
Pay cost supplemental (January and October pay raises)	5,277,000	
Total available, 1974		86,164,000
Transferred to Operating Expenses, Public Building Service, General Services Administration		-175,391
Total available, 1974		85,988,609

Summary of Increases and Decreases, 1975

	Base for 1975	Increase 1975
Habitat preservation		
To develop a system of environmental indicators	$4,239,000	$200,000
Environmental impact assessment impact of development of oil shale and low sulfur coal deposits, power plants, and stream alterations on fish and wildlife and their environments	5,606,000	1,650,000
Monitor construction of Alaska pipeline	....	50,000
To conduct coal and oil shale environmental studies	....	800,000

	Base for 1975	Increase 1975	
To develop information to facilitate balanced use of coastal ecosystems, update national wetlands inventory, and develop multi-purpose plan for Malheur-Harney Basin.....	$2,563,000	$1,525,000	
Completion of review phase of national wilderness area studies	....	-475,000	
Annualization of October 1973 pay raise		57,000	
To reimburse GSA for rental of space.....		586,000	$4,393,000
Wildlife resources			
Migratory birds	24,146,210		
Operation of 9 new refuges and strengthen 7 existing refuges		783,607	
Increase maintenance of facilities on 54 existing refuges		1,105,000	
Increase due to employees compensation payments	396,399	11,784	
Mammals and non-migratory birds	6,237,000		
Strengthen Alaska refuges operations.....		163,000	
Operate new Dismal Swamp refuge		100,000	
Increase maintenance of facilities on 5 refuges.....		70,000	
Increase non-marine mammal law enforcement..		150,000	
Expand law enforcement and research on marine mammals		658,000	
Animal damage control	6,358,000		
Animal damage control grants-in-aid to States		2,000,000	
Cooperative units - wildlife	1,150,000		
To reimburse GSA for rental of space.....		1,852,000	
Annualization of October 1973 pay raise		461,000	7,354,391
Fishery resources			
Coastal anadromous fish	3,591,000		
Operate new facilities at 3 fish hatcheries.		190,000	
Great Lakes fisheries	2,367,000		
Reservoirs and inland waters	13,999,000		
Operate new facilities at 4 fish hatcheries.		230,000	

	Base for 1975	Increase 1975	
Cooperative units - fish	$1,383,000		
To reimburse GSA for rental of space		$1,116,000	
Annualization of October 1973 pay raise		247,000	$1,783,000
Endangered species			
Endangered species	4,660,000		
Implement regulatory mechanisms and recovery techniques of endangered species		300,000	
Expand law enforcement spectrum		358,000	
To reimburse GSA for rental of space		193,000	
Annualization of October 1973 pay raise		16,000	867,000
Interpretation and recreation			
Fish and wildlife information	1,366,000		
Interpretation	2,117,000		
Environmental education	443,000		
Recreation	1,744,000		
To establish a closer working relationship with Alaska natives		160,000	
To reimburse GSA for rental of space		219,000	
Annualization of October 1973 pay raise		40,000	419,000
General administration			
General administration	3,623,000		
To reimburse GSA for rental of space		254,000	
Annualization of October 1973 pay raise		36,000	290,000
Net increase, 1975			15,106,391
Budget estimate, 1975			101,095,000

Resource Management

Analysis by Activities

Activity	FY 1973 Amount Available	(Direct Appropriation) FY 1974 Total Appropriation	Pay Cost Supplemental	Transfers 1/	Amount Available
1. Habitat preservation.....	$11,120,114	$11,681,890 2/	$726,110		$12,408,000
2. Wildlife resources	33,565,668	36,269,570	2,193,430	-175,391	38,287,609
3. Fishery resources	18,663,345	19,852,100	1,487,900		21,340,000
4. Endangered species	4,095,233	4,383,640	276,360		4,660,000
5. Interpretation and recreation	5,705,252	5,287,900	382,100		5,670,000
6. Administration	3,227,115	3,411,900	211,100		3,623,000
Unobligated balance lapsing	86,034				
Total	76,462,761	80,887,000	5,277,000	-175,391	85,988,609

1/ Transfer to GSA for leased space, unless otherwise specified.

2/ Includes $450,000 appropriated to monitor construction of the Alaska pipeline.

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Resource Management

Analysis by Activities

(Direct Appropriations)

Activity	FY 1973 Amount Available	FY 1974 Amount Available	FY 1975 Estimate	Increase(+) or Decrease(-) 1975 Compared with 1974
1. Habitat preservation	$11,120,114	$12,408,000	$16,801,000	$+4,393,000
2. Wildlife resources	33,565,668	38,287,609	45,642,000	+7,354,391
3. Fishery resources	18,663,345	21,340,000	23,123,000	+1,783,000
4. Endangered species	4,095,233	4,660,000	5,527,000	+867,000
5. Interpretation and recreation...	5,705,252	5,670,000	6,089,000	+419,000
6. Administration	3,227,115	3,623,000	3,913,000	+290,000
Unobligated balance lapsing	86,034			
Totals	76,462,761	85,988,609	101,095,000	+15,106,391

Summary Energy Research and Development Analysis
Resource Management
(in thousands of dollars)

Activity (project or program)	FY 1974 Amount Available	Regular Budget	Budget Amendment H.D.	Revised Request	Increase(+) or Decrease(-) 1975 Compared with 1974
Habitat preservation					
Environmental impact assessment program					
Oil shale environment	....	....	$200	$200	$+200
Coal environment studies	$200	$300	600	900	+700
Subtotal, energy R&D	200	300	800	1,100	+900
All other activities	80,687	99,995	....	99,995	+19,308
Total, Resource Management	80,887	100,295	800	101,095	+20,208

1. Habitat Preservation: Fiscal Year 1974, $12,408,000; Fiscal Year 1975, $16,801,000; increase of $4,393,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	+$200,000	+ 3 Perm	$4,439,000	151	Biological Monitoring - develop a system of environmental indicators.
(2)	+2,500,000	+66 Perm	8,106,000	247	Environmental Impact Assess.- assess impact of development of oil shale and low sulfur coal deposits, power plants, and stream alterations on fish and wildlife and their environments; transfer of technical information to decision makers, technicians and public; monitor construction of Trans-Alaska pipeline.
(3)	+1,050,000	+28 Perm	3,613,000	104	Comprehensive Natural Resource Planning - develop information to facilitate balanced use of coastal ecosystems; determine fish and wildlife water needs and availability in west; update national wetlands inventory; develop multi-purpose plan for Malheur-Harney Basin; completion of field review phase of wilderness area studies program.
(4)	+ 586,000	--	586,000	--	GSA space costs
(5)	+ 57,000	--	57,000	--	Annualize increased pay costs, E.O. 11739.
	+4,393,000	+97 Perm			

Cost Factors Involved in Increases

(1) 3 permanent positions at average annual rate of $25,000, $75,000; supplies, equipment, travel, and contractual services - $125,000.

(2) 66 permanent positions at average annual rate of $20,000, $1,320,000; supplies, equipment, travel, and contractual services - $1,180,000.

(3) 28 permanent positions at average annual rate of $20,000, $560,000; supplies, equipment, travel, and contractual services - $490,000.

(4) GSA space costs - $586,000; 0 permanent positions.

(5) Full year funding for 4.77 percent pay increase for classified employees authorized in October 1973 - $57,000; 0 permanent positions.

Need for Increase:

(1) Biological monitoring program, $+200,000 - 3 positions. Certain factors indicate the health and viability of an ecosystem. When the environmental stress exceeds minimum or maximum levels, these factors independently or in combination interact to reflect habitat change; species respond either positively or negatively. Habitat quality and species type, diversity, numbers, age, growth, etc., are considered suitable indicators. There are two basic approaches to the use of biological indicators: (1) detect stress caused by a particular impact on the environment; (2) estimate impact effects on an individual species population or the total community structure. There are three possible alternatives to the species approach: (a) evaluate species presence or absence; (b) evaluate species abundance; (c) evaluate species physiological and/or behavioral reaction to chemical or physical stress situations. In the more complex community approach, one considers changes in structure and energy flow in the system.

Indicators are critical to monitoring the Nation's environmental health and to detecting unsuspected but emerging environmental problems. They serve as an early environmental warning system.

The F.Y. 1975 program will consist of three research biologists who will coordinate efforts to select appropriate habitats or communities which represent all significant segments of the environment. With appropriate contractual assistance, highest priority communities will be selected. Either through review of prior studies or by actual field studies, determinations will be made as to which of the many measurable components of the system are the most sensitive to environmental change and are also subject to periodic and systematic monitoring. When an appropriate indicator (or combination of indicators) has been selected for a specific community, a sampling scheme will be devised to assure adequate monitoring. Assuming the success of this approach, expanded studies will assess other high priority habitats until a broad system of sampling has been developed. As the system becomes operative, additional effort will be required to develop a systematic approach to making the resultant data readily available to all users.

(2) Environmental impact assessment program, $+2,500,000 - 66 positions.

Over 700 major land and water resource development projects beyond the scope of any one State to address and/or involving established Federal responsibilities are under consideration or being implemented. Bureau involvement in the land and water use decisions associated with such projects is imperative if fish and wildlife values are to be recognized and adequately protected. No part of the United States is immune from such change. Thus, the scope of the Environmental Impact Assessment program is national.

Assessment of the impact of these resource development projects on fish and wildlife and their habitats is determined through project investigations; on-site surveillance; follow-up studies; environmental impact statement preparation and review; and research. Close coordination with all concerned parties and participation in public meetings also are crucial.

(a) Low sulfur coal and oil shale, ($1,100,000 - 30 positions).

Development of extensive oil shale deposits underlying Federal lands in Colorado, Wyoming, and Utah is underway. Six proposed lease tracts have been delimited, a final environmental statement has been prepared, and bids have been received on the first of the six tracts in an area of great diversity of wildlife, scenic, and open space values. The environmental statement envisions a mature industry

producing one million barrels of oil per day, which would require additional leasing of Federal lands, and additional environmental statements.

The proposed tripling of coal production by 1985, involving the development of the largest coal deposit in the world in Wyoming, Montana, and the Dakotas, as well as greatly accelerated production in the Southwest, the mid-continent and Appalachia, has the potential for enormous damages to the Nation's fish and wildlife resources. The technology must be quickly developed to predict and monitor ecological relationship and environmental trends and restore disturbed areas.

Ancillary development of both resources will include powerlines, pipelines, roads, urban development, and water impoundment and/or diversion projects. Proper concern for fish and wildlife and the related environmental values during development of both coal and oil shale resources will prevent destruction and degradation of land and water resources. Major, but ill-defined, disruption of both on and off-site ecosystems is an imminent threat. A number of threatened species of fish and wildlife, including peregrine falcon, prairie falcon, and Colorado River squawfish, will be affected.

Before development of these oil shale and coal resources it is necessary to obtain detailed fish and wildlife habitat and population inventories in all areas of potential development and environmental impact; identify informational gaps and initiate needed research; determine the role and functions of various species and habitats in the involved ecosystems; study problems identified and propose alternative solutions to attain environmental objectives; and formulate recommendations and management plans which will reduce damage to or enhance the fish and wildlife resources, and restore the land disturbed during mining operations.

Funding requested for this study will be used to augment Bureau capacity to assess accurately the impact of proposed developments on the environment, as represented by fish and wildlife resources; to formulate recommendations for alternative project designs that will lessen the impact of development on the ecosystems; and to make recommendations for restoration of the disrupted areas.

(b) Power plant siting, design, and operation, ($700,000 - 20 positions).

The Bureau comments on the impact on fish and wildlife and related environments of power plants licensed by the FPC and AEC. The Bureau also comments on dredge and fill and waste discharge permit applications associated with power plant construction and operation. Participation in planning for geothermal development in the West also is involved. In addition, many Federal, State, and private natural resources organizations as well as the electric industry seek Bureau assistance and counsel in evaluating existing or potential damages from electrical power generation outside of the formal review process.

By December 1972, the Atomic Energy Commission had issued operating licenses for 29 nuclear power plants. Fifty-five plants (47,900 Megawatts) are either under construction or under operating license review; 34 plants (35,800 Megawatts) are under construction permit review; and 76 units (80,000 Megawatts) have been ordered by utilities. By the year 2000, an anticipated 1,000 nuclear units would be needed to produce a projected 1,200,000 Megawatts. Accelerated development of fossil-fueled and geothermal power production also is projected. If irretrievable and irreversible environmental losses are to be reduced and the public's best interest represented, a balance must be achieved between power development and resource protection.

The rapid rise in power plant development, limitation in research capabilities, lack of personnel trained in power plant evaluation, and the fragmentation of efforts and interests, has not allowed the Bureau to address adequately the attendent problems. Presently, evaluation depends largely on utility company data which often are of minimal quality and quantity.

Requested funding will provide timely, constructive responses to requests being received at an increasing rate for ecological assessments and planning assistance on thermal power projects. Improved and expanded methods of collecting reliable field data for evaluation of planned or existing plant impacts on fish and wildlife and their habitats will be initiated. Standardized, statistically sound data evaluation procedures will be developed and implemented.

Contrary to popular belief, environmental problems associated with power plants are not limited to the direct mortality caused by discharge of hot water. The heated effluent also sets in motion indirect impacts on many complex interrelationships, including supersaturation problems, synergism with toxic materials in the water, and sub-lethal effects on organisms (altered spawning and hatching times, increased vulnerability to predation, etc.). In addition, mortality is caused by entrapment of fish and other animals on intake screens, and by passage of planktonic organisms through the condensers.

(c) Stream alterations, ($550,000 - 15 positions).

Stream alterations (channelization, clearing, snagging, dams, and diversions) are common water control and storage methods. The long-term ecological significance of such alterations has been largely ignored. These alterations affect the total ecosystem, which includes the channel proper and the flood plain. Flood plain ecosystems generally are recognized as the most productive inland habitat in North America. Stream flow stabilization and control diminishes productivity and profoundly affects seasonally flooded areas and the recharge of swamps, marshes, and small lakes. Stream ecosystem values in improving water quality, preventing downstream floods, and recharging aquifers have not been widely recognized or considered in past project planning.

As Federal, State, and local construction agencies have broadened their environmental perspectives in water use, demands for answers to fish, wildlife, recreation, and ecological questions have increased. The Bureau's capacity to respond has not kept pace with the need. Our ability to accurately evaluate biological and socio-economic aspects of water project development is inadequate.

Stream system alterations continue to be a major tool in water development programs as demands for available water are met. The Department of Agriculture in its Advisory WS-5 dated January 3, 1973, noted that "total channel work planned in 1,045 authorized Watershed Protection and Flood Prevention (P.L. 566) projects is 20,933.4 miles, of which 1,865 miles is identified as field ditches, the remaining 19,068.4 miles identified as channel improvement." This is but one agency's stream allocation program. The Nation's aquatic and other biological experts must provide factually based alternatives to decision makers charged with water conservation, control, and delivery, if adverse effects on stream ecosystems are to be minimized, compensated, or avoided completely.

Funding requested will improve basic understanding of stream ecosystem relationships in order to determine effects of different management and land use practices on specific ecosystems. Assessment and measurement methods to determine the degree of stream alteration effects are needed. Relationships within natural and disturbed aquatic systems must be concurrently determined. The rate at which, and locations where, habitats become damaged must be identified. Resource management skills to mitigate or avoid such losses must be developed and implemented.

(d) Information transfer, ($100,000 - 1 position).

The purpose of information transfer is to place pertinent biological information before decision makers, technicians, and the public. The need is not limited to published information. Ongoing research and management studies, their source, duration, magnitude, and location should be identified to assist efforts to locate complementary or redundant actions. Interpretation and delivery of

information to solve a variety of unspecified problems as they arise is a crucial need if fish and wildlife values are to be recognized in land use decision processes. A contract study will identify information systems, both Bureau and non-Bureau, and how they could be reoriented or expanded to satisfy the needs of fish and wildlife programs.

(e) Monitor construction of Trans-Alaska pipeline, ($50,000 - 0 positions).

Legislation passed by the Congress (S.1081) directs the Secretary to issue right-of-way permits for construction of the Trans-Alaska pipeline. Issuance of the permit will result in the submission of a large volume of pipeline and road designs by the Aleyeska Pipeline Company. Shortly thereafter, construction of airstrips, roads, bridges, pump stations and other support facilities, and the pipeline itself will get underway. Even though permit stipulations on design and construction methods generally provide for protection of fish and wildlife resources, there will be a need for on-the-spot guidance and interpretation as construction proceeds. Moreover, adherence to biological stipulations must be checked frequently and in a timely manner. Damage done to biological resources through lack of compliance is not easily repaired, and oftentimes cannot be reversed. Thus, it is exceedingly important that the Bureau of Sport Fisheries and Wildlife not only review and advise on pipeline and road designs, but that it provide environmental surveillance and monitoring during construction of the pipeline and appurtenant facilities.

The Alaska pipeline, approximately 789 miles long, would have associated with it a 373-mile access road from Livengwood to Prudhoe Bay, service roads, pump stations, camps, airfields, communications sites, material sites, a tank farm, deballasting plant, and dock facilities. The pipeline will cross more than 350 rivers and streams of four major drainage systems. More than 250 million acre-feet of runoff from Alaska's annual water crop of 1,100 million acre-feet are in danger of degradation from improperly conducted construction activities, inadvertent oil and refuse disposal, etc.

With issuance of the permit, numerous design plans will be forthcoming with only 90 days allowed for review. When construction starts, it will start at six different segments of the line. The Bureau of Sport Fisheries and Wildlife has neither the necessary funds or personnel to review the design plans and provide environmental surveillance and monitoring during the construction of the pipeline.

Supplemental funding in the amount of $500,000 was requested in Fiscal Year 1974 to carry out the design review and surveillance program during construction of the Trans-Alaska pipeline. This level of funding would provide for a two-man biologist team for each of the six construction zones, a coordinator/project leader in Alaska, and a coordinator at the Washington level--a total of 14 positions. Of the total requested, $450,000 was approved, the reduction being effected because of the time lapse in granting the right-of-way. The additional $50,000 here requested will raise the level of funding to the necessary $500,000 for monitoring of pipeline construction.

(3) Comprehensive natural resource planning program, $+1,050,000 - 28 positions.

Coordinated intra- and interagency planning is essential during the formulation and development of multiple-purpose area-wide land and water use plans. Only through Bureau involvement in such efforts is there assurance that fish and wildlife values will be recognized as beneficial and important uses in land and water allocation decision processes.

Economic, social and natural resource inventories together with findings of applied research which form the basis for decisionmaking in comprehensive plan development also readily translate into the informational requirements of the Bureau's Biological Monitoring and Environmental Impact Assessment programs.

(a) Coastal ecosystems, ($500,000 - 26 positions).

Coastal areas are being altered by man through dredging, filling, channelization, pollution, and related actions. Dredging and filling alone degrades 35,000 acres of prime fish and wildlife estuarine habitat per year, while 68 percent of the Nation's estuaries are either moderately or heavily polluted. Without proper multiple use planning and remedial management efforts, renewable natural resources and their environments will continue to be degraded significantly or essentially lost in the near future. Immediate initiative is needed to rectify the current mismanagement of coastal ecosystems.

These ecosystems include tidal wetlands, estuaries, and contiguous oceans and the Great Lakes to the depth of light penetration. These fragile environments provide basic habitat requirements and food sources for over 60 percent of the Nation's fishery resources. Coastal areas further serve as important nesting, resting, and/or feeding habitat for a variety of animal life forms, including migratory birds, fur animals, and sea mammals, as well as many threatened and endangered species. They contain significant marketable deposits of oil, gas, minerals, sand, gravel, and shell.

Other stresses on the Nation's coastal environments include urban and industrial development; navigation channels and ports; highways and airports; waste receptacles; and oil, gas, and mineral development. Uncontrolled and improperly planned and constructed alterations and developments will be prevented with adequate comprehensive planning and enforcement of existing laws.

The proposed funding will reinforce the Bureau's capability to take part in interagency planning for the balanced use of coastal ecosystems. Prototype examples of interagency estuarine planning where fish and wildlife are well represented are the San Francisco Bay Plan, Willapa Bay, Washington, and Coos Bay, Oregon. The anticipated planning efforts will be consistent with the requirements of the Coastal Zone Management Act of 1972. Developing or gathering extensive baseline information, interpreting the information for a variety of management decisions, and conducting research required to make such interpretations are key elements of this thrust. Providing the fish and wildlife inputs to multiple use and management plans will assist Federal, State, and local planning and regulatory agencies to more effectively fulfill their responsibilities to local and national interests.

(b) Western water allocation, ($350,000 - 10 positions).

In anticipation of increased involvement in multiple-use planning for western water resources, the Bureau must upgrade its capabilities to supply needed information on the relationship among the water resources, their uses and associated fish and wildlife. As yet, the interrelationships between flowing waters and associated fish and wildlife populations are not well understood. And to complicate the situation, no really comprehensive studies on user-needs are available to guide future western water allocation decisions. Ongoing studies in the Northern Great Plains Resources Program, and the Western United States Water Study, will provide some preliminary or local water requirement data. However, these data are lacking in both the scope and detail required to properly allocate western surface water resources, the demands for which are expected to double in the next two decades.

The Bureau is constantly requested to provide basic data for planning and decisionmaking actions under the Fish and Wildlife Coordination Act and the National Environmental Policy Act of 1969. To provide timely and responsive service the Bureau must upgrade its supply of information and data on the qualitative and quantitative water requirements to maintain stream and terrestrially related ecosystems. Specifically, a multi-phase investigation will begin to determine: (1) ecological instream water requirements; (2) acceptable diversion, parts and systems; (3) the potential of developing a system of

biological sieves (e.g., wetlands) to filter return flows before reintroduction into waterbodies; (4) the duration and level of needed surge flows to maintain riparian habitats; and (5) other factors which relate to the economical use of water under western conditions.

In addition, and as a corrollary investigation, determination of the extent and location of unallocated waters, and environmental needs for such waters are critical to decisions on allocations. Segments of these studies will be done under contract with outside agencies. The results of studies as to ecological relationships, coordinated with studies of economic requirements could then provide decision makers with a sound basis for determining what or which waters should be set aside for environmental needs and what or which should be made available for alternative uses.

By tailoring streamflows to ecological needs, determined by a program of related research, optimal multi-purpose use patterns could be established. Federal responsibility to assure that western waters are allocated in support of the broad public interest is clear and unequivocal.

(c) National wetlands inventory, ($600,000 - 4 positions).

The inventory of wetlands in the United States, conducted in 1953 and 1954 and summarized in U.S. Fish and Wildlife Circular 39, "Wetlands of the United States", ranks as a landmark in planning for conservation of the Nation's wildlife resources. Over 74,400,000 acres of natural wetlands were located, classified into 20 ecological types, and then evaluated as to their relative importance as waterfowl habitat on a State by State basis.

Since completion of the inventory, agricultural and industrial expansion in the United States has continued at an accelerated rate. The urbanization of our population has intensified. Over 32 million acres of agricultural lands have been drained both with and without Federal assistance while approximately 500,000 farm ponds, and over 49,000 small watershed reservoirs and lakes have been constructed. Unknown acreages of wetlands have been lost through the above activities as well as through highway construction, marina development, stream channelization, and filling to create industrial and residential sites. Wetlands destruction since completion of the initial inventory is substantial. An up-to-date inventory is needed to assess the current situation on a nationwide basis.

The need for current information on overall wetland status is especially great in the waterfowl management field because wetlands of high waterfowl value are in very short supply. Losses of high-value wetlands increase the importance of low-value wetlands and intensify the need for compensation of such losses. Only a portion of the wetlands needed to maintain waterfowl populations can be acquired and maintained in public ownership by the Federal Government and the State fish and game agencies. The bulk of the wetland acreage required to maintain abundant waterfowl populations will always remain in private ownership. Efforts to encourage preservation of privately owned wetlands require accurate current information on location, value, and availability of such wetlands.

The Bureau and the Soil Conservation Service jointly are conducting pilot wetland inventories in Maryland and North Dakota. A third pilot study soon will be started in the Atchafalaya Basin, Louisiana. The studies will firm up the methodology to be used in conducting an updated wetlands inventory. Fiscal Year 1975 will mark the transitional period between the pilot studies and the actual wetlands inventory with the work being contracted out to State fish and game agencies, universities, or qualified private organizations. The contract work and project coordination will be administered under the supervision of four Bureau personnel.

(d) Malheur-Harney Lakes Basin studies, Oregon, ($75,000 - 3 positions).

Both Malheur and Harney Lakes lie within the 180,850-acre Malheur National Wildlife Refuge. Malheur Lake is the largest freshwater marsh in the western United States and is world-famous for the number and variety of migratory birds it supports. Harney Lake is heavily used by waterfowl and shorebirds during highwater years.

Malheur is wholly dependent on the natural inflow of the Silvies and Blitzen Rivers. Major storage and/or diversion works are considered a serious threat to the marsh. Roads and other obstructions impede runoff. Spring flood damage has increased with increased residential development. Irrigation water demand has increased. With no dependable means of delivery available, greater ground water pumping has resulted.

The data proposed to be gathered during the study will provide the foundation for future decisions regarding the management of the basin's natural resources. They will serve as the base on which to build a comprehensive plan for the land and water use of the Malheur-Harney Basin. Four major elements are involved in the study: (1) accumulation and analysis of biological and ecological data; (2) determination of land and water resource availability; (3) determination of current resource use and management practices; (4) accumulation and analysis of socio-economic data.

The Bureau of Sport Fisheries and Wildlife will have overall responsibility for management and direction of the study. Other agencies involved include the Corps of Engineers, Geological Survey, Bureau of Land Management, Bureau of Reclamation, Forest Service, Soil Conservation Service, Environmental Protection Agency and various State and local agencies.

(e) Wilderness studies, ($-475,000 - -15 positions).

Field studies leading to recommendations to the Congress on wilderness area proposals will be essentially completed in F.Y. 1974 in accordance with the provisions of the Wilderness Act (P.L. 88-577). The F.Y. 1975 program will consist primarily of congressional hearings and public contacts. With the completion of field investigations and hearings, funding and manpower currently devoted to this effort can be reduced. A small staff will be retained to carry out the remaining steps of the wilderness establishment procedure for proposals not yet acted on by the Congress and the President.

(4) GSA space costs, $+586,000 - No positions. Beginning in F.Y. 1975 and in compliance with the Public Buildings Amendments of 1972, P.L. 92-313, agencies shall be charged for space and related services provided by the General Services Administration at rates approximately equivalent to commercial charges. The amount requested is required to reimburse GSA for office, special, and storage space currently occupied by the Bureau and effectively utilized to further efforts toward achieving program objectives.

(5) Increased pay costs, $+57,000. The total requested is $857,000, of which $57,000 is included in this activity. The increase is needed to annualize the October 1973 increased civilian pay costs granted pursuant to Executive Order 11739. The additional funds are necessary to provide for continuing Bureau operations and maintenance at the F.Y. 1974 program level and does not provide for increasing the program.

Habitat Preservation Funding

Program	F.Y. 1974 Estimate	F.Y. 1975 Estimate	Change
Biological Monitoring	$ 4,239,000	$ 4,439,000	+ 200,000
Environmental Impact Assessment	5,606,000	8,106,000	+2,500,000
Comprehensive Natural Resource Planning	2,563,000	3,613,000	+1,050,000
GSA Space Costs		586,000	+ 586,000
Annualized Pay Costs		57,000	+ 57,000
Totals	$12,408,000	$16,801,000	+4,393,000

Biological Monitoring: The objectives are:

1. To ascertain for critical habitats the most sensitive and measurable indicator of environmental quality.

2. To prioritize such habitats in terms of relative importance to the welfare of man and susceptibility to degradation.

3. To develop a systematic sampling scheme to continually monitor the selected indicator.

4. To implement a systematic method of communicating baseline data as well as significant alterations of indicators to all appropriate users in a timely manner.

Development of a comprehensive early warning system would require:

1. Selection of suitable indicator species and habitats, whether now assessed or not.

2. Develop proper sampling techniques for the selected indicators.

3. Select sample size, frequency, and geographical coverage that will provide reliability.

4. Systematically monitor the indicator species and habitats.

5. Continually reassess monitoring programs and appropriateness of indicator species and habitats.

Environmental Impact Assessment: The objectives are:

(1) To acquire the impact assessment-oriented data necessary for analysis of development project or program proposals, and for meaningful participation in the formulation of criteria, standards, stipulations, and/or development guidelines.

(2) To provide technical assistance to State and local governments and to Federal licensing and construction agencies which includes sound recommendations for mitigation or enhancement measures to be included in project plans.

(3) To provide technical assistance to the Department and other Federal agencies in the preparation and review of environmental statements, and to insure that Bureau programs and actions are carried out in a manner consonant with the letter and spirit of NEPA.

These objectives support the program goal to assure that fish and wildlife resources receive equal consideration with other objectives of specific land and water development projects where a Federal responsibility or interest exists. This requires that the need and opportunity for mitigation or enhancement measures is

recognized and satisfied; that the environmental impacts of and all alternatives to these projects are satisfactorily examined as required by NEPA; and that Bureau environmental policies regarding its own actions and those of other agencies be developed and implemented.

No part of the United States has been, or now is, immune from some form of land or water resource change. Thus, the Environmental Impact Assessment Program is national in scope.

The assessment of the impact of land and water resource development projects on fish and wildlife and their habitats is being determined through project investigations; on-site surveillance; follow-up studies; environmental impact statement preparation and review; close coordination with all concerned agencies, Federal, State, or other; research; and participation in public meetings.

The table below includes tabulation of projects proposed, as well as permits issued, by the Corps of Engineers, Bureau of Reclamation, Soil Conservation Service Federal Power Commission, Atomic Energy Commission, Bureau of Land Management, Forest Service, International Water and Boundary Commission, and Environmental Protection Agency.

	1973 Actual	1974 Estimate	1975 Estimate
Permits 1/	13,000	37,500	40,000
Resource Development studies	480	490	510
Environmental impact statement preparation and review	2,000	2,400	3,000

Comprehensive Natural Resource Planning: The objectives are:

(1) To participate in all levels and stages of inter-agency basin planning to insure adequate consideration of fish and wildlife values.

The Bureau presently is involved in eight comprehensive basin studies coordinated by the Water Resources Council under the provisions of the Water Resources Planning Act of 1965.

(2) To represent fish and wildlife interests in land and water use decisions covering special or regional management areas.

In this area the Bureau is assisting in the preparation of State water plans in eight western States, providing fish and wildlife inputs into the Atchafalaya Basin study, and updating management plans for 12 Federal water development projects in Oklahoma. Special studies involving extension of the Great Lakes navigation seasons, management plans on certain Federal installations (military, etc.) and Northern Great Plains Resources are underway.

(3) To participate in efforts designed to identify and promote legislative preservation of unique natural areas by assisting in inter-agency review and planning for wild and scenic rivers, wilderness areas, national recreation areas and national wildlife refuges.

1/ Include applications for permits under Sec. 10 of 1899 River and Harbor Act and Sec. 404 of Federal Water Pollution Control Act; Sections 101 and 102 of Marine Protection, Research, and Sanctuaries Act; National Pollutant Discharge Elimination System; Federal Power Commission and Atomic Energy Commission power plant permits; Forest Service special use permits and Bureau of Land Management rights-of-way grants.

In the present fiscal year, 22 wilderness area studies are scheduled for completion and 36 public hearings on wilderness proposals are scheduled to be conducted. Three candidates for the national wild and scenic river systems are also under study.

Comprehensive natural resource planning is viewed by the Bureau as both a process and a product. The process requires that there be a clear statement of goals and objectives concerning both user and resource needs; that problems be identified and alternative solutions be evaluated; and that decisions as to actions be synthesized into a problem-solving program complete with targets to be accomplished over time. With these decisions being explicitly translated into a plan of implementation, the plan becomes the product. The Comprehensive Natural Resource Planning goal thus is to assure that fish and wildlife values are recognized and represented in all land and water use studies and decision processes.

Examples of Recent Accomplishments: (1) Operation of newly established river basin stations in Panama City, Fla.; Charleston, S.C.; Annapolis, Md.; and Rock Island, Ill., permits more efficient and less costly participation in public works programs and surveillance of both legal and illegal dredging and filling and related activities.

(2) A recently drafted Navigable Waters Handbook is the first of a series of seven handbooks which will provide procedural and policy guidelines for critical elements of the resource development program.

(3) A nationwide systematic effort has been developed and initiated to identify apparent illegal construction activities in navigable waters that are damaging estuarine and related resources.

(4) Participation by personnel of this program helped lead to the successful completion of several Department environmental statements, including those on oil shale and geothermal steam development. Bureau participation insured full assessment of environmental impacts, and additional stipulations were provided which further protect fish and wildlife resources during development of the resource.

(5) In the last ten years a total of 27 Bureau prepared basin plans for fish and wildlife have been integrated into comprehensive, multiple use plans for 29 of the Nation's river basins. Eleven of these involve framework plans for 13 major basins and 16 of the more detailed or level B sub-basin plans.

(6) Detailed area plans for fish and wildlife management recently were developed for Green Mountain National Forest in New Hampshire; Tinicum Marsh, Pennsylvania; Seal Beach, California; and Starkweather Drainage District, North Dakota.

(7) The wilderness program has resulted in proposals for new areas at 81 national wildlife refuges, comprising some 900,000 acres. Of this number, congressional action for preservation has been taken on 25 refuges, encompassing over 100,000 acres.

(8) Since the passage of the Wild and Scenic Rivers Act, the Bureau has provided fish and wildlife inputs to interagency studies on 25 candidate rivers.

(9) Pesticide and heavy metal concentrations were monitored at 153 stations, of which 100 were related to fish and 53 to birds.

(10) Field appraisals on applications of Dylox, Acephate, and Endrin were conducted to determine the effect of these chemicals on wildlife under operational conditions. Dylox and Acephate are gaining widespread use in insect control.

2. Wildlife Resources: Fiscal year 1974, $38,287,609; fiscal year 1975, $45,642,000 increase $7,354,391. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+1,888,607	+23 Perm +75 Other	$26,034,864	1,133	Migratory Birds-Operate 9 refuges; Alaska operations; refuge maintenance.
(2) +1,141,000	+35 Perm + 5 Other	7,378,000	252	Mammals & Non-Migratory Birds-Operate a new refuge; refuge maintenance; increase law enforcement; marine mammals research and protection; Alaska operations.
(3) +2,000,000	-70 Perm	8,358,000	266	Animal Damage Control-Implement proposed legislation, grants-in-aid to States.
(4) + 11,784	....	408,183	....	Increased employee compensation costs.
(5) +1,852,000	....	1,852,000	....	GSA space costs.
(6) + 461,000	....	461,000	....	Annualize increased pay costs, E.O. 11739
$+7,354,391	-12 Perm +80 Other			

Cost Factors Involved in Increases

(1) Seventeen permanent positions at an average annual rate of $14,500 ($246,500) for operation of national wildlife refuges; 6 permanent positions at an average annual rate of $18,000 ($108,000) for increased Alaskan refuge operations; 75 temporary positions ($450,000) for rehabilitation projects; purchase of equipment, supplies and contractual service, $1,084,500.

(2) Three permanent positions at an average annual rate of $18,000 ($36,000) for expanded operation of Alaskan refuges; 3 permanent positions at an average annual rate of $14,500 ($43,500) for operation of new refuges; 6 permanent positions at an average annual rate of $14,500 ($87,000) for increased non-marine and non-migratory bird enforcement activities; 23 permanent positions at an average annual rate of $14,500 ($333,500) for increased marine mammal research and law enforcement; 5 temporary positions ($30,000) for refuge rehabilitation projects; purchase of equipment, supplies and contractual services, $611,000.

(3) $2,000,000 for implementation of animal damage control grant-in-aid program.

(4) To reimburse the Bureau of Employees Compensation, U.S. Department of Labor, for payments made to employees of the Bureau of Sport Fisheries and Wildlife for work-connected death, disability or injury.

(5) Costs for leased space and related services provided by the General Services Administration.

(6) Full year funding for 4.77 percent pay increase for classified employees authorized in October 1973.

Need for Increase:

(1) Migratory Birds, $+1,888,607 - 23 positions.

(a) Operation of migratory bird refuges, ($490,607 - 17 positions).

Funds are needed for operation of 9 national wildlife refuges. Operation and habitat management will be initiated or accelerated on 8 units. Establishment of a refuge complex to improve operating efficiency is also included. The requested funding and staffing will be used for operations, including habitat management and improvement, repairs and maintenance of facilities acquired with the land or developed since acquisition, and for equipment. This will better enable the Bureau to insure that newly acquired refuge lands are protected and managed to provide migratory bird habitat as intended. If funds are not provided, the acquisition-development-management sequence will be interrupted at a critical point when program benefits can be produced after substantial capital has been invested in land acquisition and facility development.

Three refuges--Nisqually Flats, Washington; Humbolt Bay and San Francisco Bay, California--contain vital estuarine habitat. Protection and management of this habitat will benefit all estuarine related fish and wildlife, but particularly waterfowl species in low numbers in the Pacific Flyway such as brant, swans and canvasback ducks. Refuge operations will also benefit light-footed clapper rails, California clapper rails, California black rails and California least terns, all of which are endangered species. A total of $198,607 and eight positions is necessary to fund these refuges.

A Lower Columbia River Complex Office will be established to supervise, coordinate and plan the activities of four existing refuges in the Lower Columbia River Basin. This action will reduce the average grade level of supervisory personnel and facilitate the exchange of equipment between refuges. The cost of this office is estimated to be $65,000; two positions are required.

The Huleia and Hanalai units of the Main Island NWR located in the central Pacific Ocean have been activated to manage waterfowl and endangered water birds including Hawaiian stilt, coot, gallinule and koloa which use these islands. Initial funding and staffing of $30,000 and one position are requested for these units.

Three refuges--Lewis and Clark, Washington; Lake Alice, North Dakota; Saddle Mountain, Washington--will provide prime waterfowl production, migration and wintering habitat in inland areas primarily for mallards and canvasbacks. For these three refuges, $117,000 and six positions are requested.

Tinicum National Wildlife Refuge, Pennsylvania, is a valuable migratory bird area, located partially within the City of Philadelphia. It will produce black ducks, mallards and teal and serve as an urban environmental education center. The cost of operating this facility is estimated to be $80,000. No new positions are needed.

(b) Alaskan Operations, ($293,000 - 6 positions).

An increase is requested in several programs to support operational and development needs for protection of unique wildlife and habitat resources in Alaska. A portion--$293,000--of this increase is directed toward maintaining effective refuge operations primarily of benefit to the migratory bird resource.

1. Alaskan wildlife refuges, ($223,000 - 4 positions). The Clarence Rhode, Aleutian Islands, Kenai, Arctic, Kodiak and Nunivak National Wildlife Refuges are

of particular importance in maintaining continental waterfowl populations. Of immediate concern is the Aleutian Canada goose, an endangered species. However, these refuges are also important for trumpeter swans, Pacific black brant, dusky Canada geese, canvasbacks and bald eagles. Populations of these species are relatively low. Funds for operation of these six refuges have been inadequate to maintain migratory bird habitats necessary to maximize waterfowl and other migratory bird populations. An increase of $193,000 and four positions will be used to intensify habitat management, provide necessary supplies and replace equipment.

Wildlife surveys are essential for the effective management of Aleutian Islands, Arctic, Kenai, Kodiak, Izembek and Nunivak Refuges. Aerial travel is the only effective means of acquiring essential information on bird numbers, distribution and habitat use. A Super Cub aircraft with floats costing $30,000 will be purchased for this survey work.

Increases requested in this program and the Mammals and Non-Migratory Bird Program will be used to provide technical assistance to Alaskan Natives in managing wildlife located on Native-owned lands located within the boundaries of national wildlife refuges in Alaska.

2. ANCSA Refuge Acquisition, ($70,000 - 2 positions). The Alaska Native Claims Settlement Act directs the Secretary to recommend to Congress lands for inclusion in the National Wildlife Refuge System. The Secretary recommended in December that nearly 32 million acres in nine units be considered as potential additions. A small realty staff will be utilized to identify inholdings and mineral and mining claims within the additions proposed by the Secretary.

(c) Maintenance of migratory bird refuge facilities, ($1,105,000 - 75 temporary).

Long term underfunding has resulted in deterioration of facilities at many refuges. More than 100 migratory bird refuges have facilities in urgent need of repair or maintenance. The requested increase will be allocated on a priority basis which recognizes the importance of each facility to program objectives and its state of disrepair. Failure to perform this maintenance will accelerate deterioration and increase future costs for work which eventually must be performed. Substandard facilities result in inefficient operation and reduced output in terms of migratory bird production, habitat management, interpretation programs and quality wildlife-oriented recreation.

The requested increase will be allocated as follows:

Refuge	Purpose	Amount
Eufaula, Alabama	Rehabilitate pump	$25,000
Aleutian Islands, Alaska	Rehabilitate building and sewer system	31,000
Clarence Rhode, Alaska	Replace headquarters sewer and heating systems	40,000
Izembek, Alaska	Resurface bridges	5,000
Havasu, Arizona	Replace storage building, replace irrigation system mainline	20,000
Imperial, Arizona	Repair irrigation system	12,000
Holla Bend, Arkansas	Replace farm tractor	13,000
Wapanocca, Arkansas	Rehabilitate dikes and roads	25,000
Sutter, California	Restore water control structure	25,500
Chassahowitzka, Florida	Replace airboat	6,000
Ding Darling, Florida	Replace water control structure	50,000
Merritt Island, Florida	Replace portable pump for waterfowl impoundments	10,000
St. Vincent, Florida	Replace water control structure	15,000
Okefenokee, Georgia	Repair water structure	10,000
Piedmont, Georgia	Rehabilitate dikes and road	8,000
Camas, Idaho	Rehabilitate main division structure	59,400
Union Slough, Iowa	Dike repairs	14,000
Quivera, Kansas	Rehabilitate shop	7,000
Lacassine, Louisiana	Rehabilitate spillways	25,000

Refuge	Purpose	Amount
Blackwater, Maryland	Replace portable pumps	3,500
Shiawassee, Michigan	Restore dikes	27,000
Agassiz, Minnesota	Repair water control structure	15,000
Benson WMD, Minnesota	Restore water control facilities	57,000
Fergus Falls WMD, Minn.	Restore headquarters	22,000
Noxubee, Mississippi	Rehabilitate levee and access road	25,000
Swan Lake, Missouri	Rehabilitate headquarters building	20,000
Benton Lake, Montana	Pump and engine repair	20,000
Bowdoin, Montana	Rehabilitate dry lake unit	18,000
Medicine Lake, Montana	Rehabilitate dike and canal	19,000
Valentine, Nebraska	Rehabilitate sewer system	7,000
Brigantine, N.J.	Repair water control structure	35,000
Bitter Lake, N.M.	Clear drain channels, repair boundary fences	14,000
Bosque del Apache, N.M.	Rebuild irrigation pumps, replace structures and clear irrigation ditches	21,000
Las Vegas, N.M.	Replace irrigation structure	7,000
Maxwell, N.M.	Replace irrigation structure	12,000
Montezuma, New York	Repair dikes and water control structures	60,000
Crosby WMD, N.D.	Rehabilitate road and dam	8,000
Devils Lake, N.D.	Plug drains and ditches	22,000
Kulm WMD, N.D.	Rip-rap wing walls	4,000
Upper Souris, N.D.	Rehabilitate shop	25,000
Malheur, Oregon	Rehabilitate water delivery system	35,200
Erie, Pennsylvania	Repair dikes and roads	24,000
Savannah, S.C.	Repair water control structures	25,000
Sand Lake, S.D.	Rewire service building	5,000
Hatchie, Tennessee	Rehabilitate roads	10,000
Tennessee, Tennessee	Replace farm tractor	18,000
Anahuac, Texas	Stabilize shorelines	14,000
Aransas, Texas	Repair water control structure	34,000
Laguna Atascosa, Texas	Replace water control structure, repair spillway crossing	10,000
Santa Ana, Texas	Rebuild boundary fence	6,000
Fish Springs, Utah	Repair dike, ditch and water control structure	7,000
Ouray, Utah	Rehabilitate domestic water system	5,000
Presquile, Virginia	Stabilize channel banks	16,000
Ridgefield, Washington	Restore pumping facility	27,400
Horicon, Wisconsin	Rehabilitate drainage ditches	10,000
Necedah, Wisconsin	Repair water control structure	16,000
		$1,105,000

Without adequate maintenance, dikes and levees will be subject to breeching, channels will carry insufficient amounts of water to flood impoundments and equipment will fail during critical periods. Without adequate fences, trespass by livestock cannot be prevented. Without properly maintained roads, access will be lost to fields and important water control facilities, and visitor travel will be reduced. The end result of delayed maintenance of equipment and facilities is shortened life, early replacement and compounded repair costs. The larger cost, however, is the absence of quality habitat for migratory birds and other wildlife. The refuge system's function is to provide food, water and sanctuary for these birds. Without adequate facilities these purposes cannot be achieved.

Seventeen of the 59 high priority projects included in this request exceed the $25,000 limit imposed by the Congress in the FY 1968 appropriation bill. If

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constrained to the $25,000 limit, these 17 important projects would have to be dropped. To alleviate this constraint and fund the highest priority projects, we have requested the Appropriations Committees increase the funding limitation on individual projects to $60,000.

(2) Mammals and Non-Migratory Birds, $+1,141,000 - 35 positions.

(a) Alaska refuges, ($163,000 - 3 positions).

Refuges in Alaska of significant benefit to mammals and non-migratory birds include Arctic, Kenai, Kodiak and Nunivak. Operation and maintenance funds for these refuges have been insufficient in recent years. To overcome the maintenance deficit, upgrade field operations of existing units and establish new field offices, a total of $63,000 (no positions) is requested.

The Kenai Moose Range needs extensive aerial photo coverage to delineate forest areas infested with spruce budworm, to plan moose range improvement programs, and to identify areas where erosion control is needed. These photos are also required to provide a basis for zoning the refuge for the most desirable type of public use in each area of the refuge. An estimated $50,000 is necessary to fund the Bureau's portion of a contract covering all the Kenai Peninsula. The opportunity to realize substantial economies of scale through this cooperative venture with the U.S. Forest Service and State of Alaska will be lost without the funds requested.

Habitat enhancement is required at the Kenai Moose Range to increase its wildlife carrying capacity, especially for moose. This would increase the recreational potential sustained by the wildlife resource. Approximately 7,000 acres/year need to be worked to retard plant succession to maintain the moose population at about 10,000 animals, the optimum herd size for this refuge. $50,000 is requested for this work.

(b) New wildlife refuges, ($100,000 - 3 positions).

Dismal Swamp National Wildlife Refuge, straddling the Virginia-North Carolina boundary, was accepted as a gift from the Union Bag-Camp Corporation through the Nature Conservancy primarily to preserve indigenous mammals and non-migratory birds and their unique swamp habitat. The refuge provides a wide range of recreational and esthetic values by affording opportunities to observe and enjoy wildlife in an unusual wooded swamp. High public interest due to uniqueness of this ecosystem and national publicity associated with this donation require prompt, positive management of this new unit of the National Wildlife Refuge System. The increase is needed to initiate a management program designed to safeguard the wildlife and habitat resources of this major new refuge.

(c) Maintenance of wildlife refuges, ($70,000 - 5 temporary).

Maintenance and rehabilitation on national wildlife refuges have been at an unacceptably low level in recent years due to fund restrictions. It is essential that additional funding be made available to adequately maintain these facilities, thereby precluding premature deterioration. Full discussion of these problems and needs is presented under the Migratory Bird Program, page FSF- 82.

The funds will be used for the following rehabilitation projects:

Refuge	Purpose	Amount
Kofa, Arizona	Replace boundary and entrance signs to protect candidate wilderness areas	$18,000
Cabeza, Arizona	Replace boundary and entrance signs to protect candidate wilderness areas	13,000

Refuge	Purpose	Amount
Ft. Niabrara, Nebr.	Domestic water supply and rewire building	$10,000
Kenai, Alaska	Rehabilitation of headquarters and heating system	12,000
Kodiak, Alaska	Rehabilitation of headquarters	17,000
		$70,000

(d) Non-marine mammal law enforcement, ($150,000 - 6 positions).

Under the Lacey Act the Federal Government has jurisdiction when wildlife are taken, transported or sold in violation of another Federal law or when wildlife taken illegally anywhere move in interstate or foreign commerce.

Importation of wildlife, primarily game and fur products, requires constant monitoring to detect illegal entry, especially as it relates to large scale commercialization of wildlife or its products. The closing of U.S. markets for illegally taken wildlife is often the only effective way to provide protection for valuable world stocks of wildlife. It is necessary to increase our staff in order to obtain broader coverage at the points of entry and to provide them with the necessary direction and support.

Increased instances of commercialization of domestic wildlife, as in the hide and pet industries, require additional investigation to prevent significant illegal exploitation. Most such activities involve interstate commerce, and thus require Federal law enforcement efforts. In addition, increasing mobility among hunters contributes to the problem.

A law enforcement information gathering capability is needed. Such a system will permit determination of trends, methods of operation of violators; early detection of organized rings; and will pinpoint locations of increased violations, both domestic and foreign. There is also a vital need to develop new enforcement training tools, such as a collection of study skins for wildlife and its products, compilations of foreign laws and revisions of State wildlife law compilations. Such tools are essential for efficient enforcement practices with resultant protection for the total wildlife resource.

(e) Marine mammals, ($658,000 - 23 positions).

The Marine Mammal Protection Act of 1972 designated responsibility for conservation and management of marine mammals jointly to the Departments of the Interior and Commerce. Under the Act, the Secretary of the Interior has responsibility for polar bears, walrus, sea otters, manatees and dugongs. These additional responsibilities strengthen existing responsibilities derived from the Fish and Wildlife Coordination and Lacey Acts.

1. Law enforcement, ($125,000 - 5 positions). The Bureau of Sport Fisheries and Wildlife is responsible for enforcing ten new statutory provisions, including prohibitions on the taking and importing of marine mammals. The Act requires a continuing effort to prepare regulations of various types, establishing a complex permit application and review system, and provides exceptions for Indians, Aleuts and Eskimos. The Bureau will often be required to investigate the background of permit applicants and to conduct follow up checks on the activities of permittees. Increased surveillance is essential, especially along the Alaskan Coast and in offshore waters, in order to provide protection of these species, particularly the sea otter. The present funding level is inadequate to finance these additional requirements.

To meet responsibilities, we will employ two additional special agents and three new clerical personnel. In addition to the positions, funds will be expended on operations and equipment.

2. Research, ($533,000 - 18 positions). Marine mammals research effort is required to develop a scientifically based program for these species and to comply with statutory requirements for annual updated status reports. Research to determine the effects of human activities on the marine ecosystems of these species and to recommend management practices that will maintain their health and viability is essential and will be emphasized in the FY 1975 program. The required research will be conducted inhouse and augmented with cooperative studies funded through grants.

Specific research concerning polar bears includes studies of denning along the Alaska Coast; movements, distribution and productivity in the Chukchi Sea; populations inhabiting the permanent pack ice of the Arctic Ocean; summer distribution north of Alaska; geographically isolated subpopulations; and further development of radio tracking techniques.

Research on the walrus will concentrate on determining seasonal and geographic areas of abundance and population dynamics of the Pacific walrus; monitoring the harvest of this form; and comparative studies of the biology of the similar Atlantic walrus.

Sea otter research will concentrate on determining distribution and population dynamics of this species in the Pacific Northwest.

Manatee and dugong research will concentrate on determining population dynamics, delineating their distribution, and determining the abundance of these species throughout their ranges.

In order to carry out this program, it will be necessary to open a new substation in the southeastern United States and expand the Anchorage substation.

(3) Animal Damage Control, $+2,000,000 - 70 positions.

The Congress is now considering new legislation (H.R. 11266), based on the Administration's proposed Animal Damage Abatement Act of 1973. The bill passed by the House Subcommittee would (1) authorize an expanded program of research concerning methods of managing predatory and depredating animals, and controlling damage caused by them, (2) provide grants-in-aid to States for carrying out programs for management of predatory and depredating animals, (3) provide criminal penalties for field use on Federal lands of any chemical toxicant with secondary poisoning effects, (4) repeal the Act of March 2, 1931 (7 U.S.C. 426-426b), pertaining to eradication and control of predatory and other wild animals, (5) authorize the use of chemical toxicants in the emergency situations specified in the bill, and (6) authorize the use of spring activated cyanide release devices (M-44's) and certain other chemicals for mammal control.

The proposed legislation declares that operational animal damage control programs should be a State responsibility. State assumption of this responsibility is encouraged by providing grants-in-aid to States whose predator control programs meet standards established by the Secretary of the Interior. No Federal assistance will be available to a State whose program entails, except in emergency situations specified in the bill, the use of chemical toxicants against predators or any use of chemical toxicants having secondary poisoning effects. During the transitional period from Federal to State operation of the programs, continued Federal operational assistance can be provided at the discretion of the Secretary of the Interior.

To implement grant-in-aid provision of the legislation supported by the Administration will require a total of $4 million. This $4 million will be derived by reducing direct Federal operations under the existing animal damage control program by $2 million, and by adding $2 million in new funds. The reduction in the existing program funding would result in a decrease of 70 positions from that program. Flexibility in the application of the $2 million reprogrammed funds and

70 positions will be required to accommodate the individual States' capability to adopt legislative authority to cooperate under the provisions of the Act. Most States do not now have legal authority to accept the predator control activities as set forth in the proposed legislation. The total $4 million, less a small amount for administrative overhead, would be available for grants-in-aid to qualifying States. Assuming passage of the legislation, the following responsibilities would remain:

1. Operational responsibilities to insure a smooth transitional period within the time limits of the Act--especially in States needing legislation and/or State funding.

2. Initiate training programs for State and Federal agency personnel.

3. Increase capability to provide technical assistance and extension efforts in predator control.

4. Continue other animal damage control responsibilities, i.e. bird and urban rodent problems.

5. Certification of Bureau applicators of pesticides as required by the Federal Insecticide, Fungicide and Rodenticide Act.

In the event such legislation does not pass, the cooperative operational program would be conducted with the same base funds and personnel as in FY 1974. Bureau-wide, this would require an additional 140 positions, because the reduction of positions in this program has been applied to offset increases in other programs justified in this budget.

(4) Employee Compensation, $+11,784 - no positions.

This increase is needed to reimburse the Bureau of Employee Compensation, Department of Labor, for payments made to employees of the Bureau of Sport Fisheries and Wildlife or their survivors for work related injuries or deaths.

(5) GSA space costs, $+1,852,000 - no positions.

Beginning in FY 1975 and in compliance with Public Buildings Amendments of 1972, PL 92-313, agencies shall be charged for space and related services provided by the General Services Administration at rates approximately equivalent to commercial charges. The amount requested is required to reimburse GSA for office, special and storage space currently occupied by the Bureau and effectively utilized to further efforts toward achieving program objectives.

Program of Work:

The goal of this activity is to assist in the enhancement and control of the Nation's wildlife resources to assure that sufficient populations are available for the use and enjoyment of all Americans without causing excessive damage to economic activities.

To accomplish this goal the Bureau will increase and maintain wildlife stock through protecting and improving wildlife habitat. In addition, the Bureau will attempt to insure that wildlife species do not interfere with man's interests.

Principal responsibility for management of migratory birds and other wildlife in the United States is dictated by treaties and Congressional Acts and is discharged by the Bureau. To carry out these responsibilities, the Bureau maintains an extensive wildlife refuge system consisting of 356 areas containing 30.7 million acres managed for both migratory birds and other wildlife of national significance; guides and coordinates national migratory bird programs; enforces Federal game laws and regulations; provides technical assistance in the management of wildlife on Indian and other Federal lands; conducts research to improve wildlife management

capabilities; provides technical assistance and extension services to Federal, State, Indian and other public and private entities for responsible control of wildlife causing damage to human enterprises (FY 1974 cooperator funds totaling $5.2 million are anticipated to support this function); and supports cooperative wildlife research units at 20 universities to train wildlife biologist and conduct research.

Wildlife Resources Funding

Program	FY 1974 Estimate	FY 1975 Estimate	Change
Migratory Birds	$24,542,609	$26,443,000	$+1,900,391
Mammals & Non-Migratory Birds	6,237,000	7,378,000	+1,141,000
Animal Damage Control	6,358,000	8,358,000	+2,000,000
Cooperative Wildlife Units	1,150,000	1,150,000	....
GSA Space Costs	....	1,852,000	+1,852,000
Pay Act Costs	....	461,000	+ 461,000
Totals	$38,287,609	$45,642,000	$+7,354,391

Major Workload Factors	1973 Actual	1974 Estimate
Bureau land administered for:		
Migratory birds (no. of areas)	333	336
(millions of waterfowl days)	1,650	1,653
(acres)	8,158,000	8,180,000
Other wildlife (no. of areas)	23	23
(acres)	21,275,000	21,275,000
Waterfowl production areas (acres)	1,303,732	1,378,000
Waterfowl produced	1,363,000	1,980,000

Migratory Birds: Program objectives include:
(1) To meet the requirements of people for both consumptive and nonconsumptive recreational use of migratory birds.
(2) To enhance the public understanding and appreciation of migratory birds and their importance to man's well being.
(3) To contribute to a quality environment for the American people by preserving and improving migratory bird populations and their habitats.

Much of the conservation and utilization of migratory birds is guided by international treaties and by Congressional acts. The most significant enabling legislation includes the Migratory Bird Treaty Act (1918), Fish and Wildlife Coordination Act (1934), Migratory Bird Hunting Stamp Act (1934), Bald Eagle Act (1940), Fish and Wildlife Act (1956), Wetland Loan Act (1961), and the Endangered Species Conservation Act (1969).

Management of migratory birds includes the enforcement of regulations governing the taking of game and the protection of nongame species by a force of 205 special agents. This work is accomplished through first line patrol and by gaining cooperative assistance from 6,000 State officers. The operation of 333 national wildlife refuges totaling 8.2 million acres contributes significantly to the management of waterfowl and to the welfare of nongame migratory bird species. An extensive research and investigation program is conducted to provide data to guide management decisions, particularly those related to harvest regulations for game birds. These studies include annual evaluations of the status and harvest of waterfowl, doves and woodcock, and long-term studies of the life history, ecology and management of migratory birds.

Recent Migratory Bird Program Results

Eleven new national wildlife refuges were established primarily for migratory birds during the past year. The National Wildlife Refuge System provided 1.4 billion waterfowl use days during calendar year 1972. About 1.4 million waterfowl were produced and 1.85 million hours of recreation were provided for migratory bird hunters by the refuge system.

During the 1972 waterfowl season, hunters nationally spent 14.7 million days afield and retrieved 13.0 million ducks, 0.9 million coots and 1.1 million geese and brant.

The status of key migratory game bird populations is measured annually to provide guidance in establishing hunting regulations. Information on ducks and geese was developed with data gathered on about 35,000 miles of aerial transects covering the principal duck nesting range in the United States and Canada. The trend in mourning dove populations is determined annually using data from a survey conducted on about 650 20-mile routes randomly located throughout its breeding range. The status of woodcock is also determined annually using data from a survey conducted on about 800 routes randomly located in woodcock breeding habitat.

A contingency plan was developed to prevent and combat duck viral enterities (DVE) on Bureau lands. Extensive field tests were conducted to evaluate the use of soft steel shot for waterfowl hunting, and a major research effort was completed which provided evidence on the degree of exposure of ducks to the lead pellets that cause lead poisoning.

Other results of the program include: maintenance of migratory bird populations that provide recreational opportunities including hunting, provision of Federal protection for game and nongame migratory birds; improved habitats for nesting, migrating and wintering migratory birds in national wildlife refuges; minimized losses of migratory birds due to disease, pollution and accidents; and improved coordination of efforts by agencies involved with migratory bird management.

Mammals and Non-Migratory Birds: The objectives of this program are:

(1) To manage Bureau land holdings containing desirable mammal and non-migratory bird habitat; to maintain mammal and non-migratory bird populations on this habitat; and to protect mammal and non-migratory bird populations from overuse.

(2) To provide resource management information for Federal and State land management agencies, private organizations and individuals.

Since most mammals and non-migratory birds reside within a given State, it is the State's sovereign and jurisdictional responsibility to manage such species. Bureau responsibility concerns primarily Federal lands such as national wildlife refuges, national parks, national forests, military installations and Indian reservations. Marine mammals including the polar bear, walrus, manatee, dugong and sea otter are a Bureau responsibility under the Marine Mammal Protection Act of 1972.

Through legal authority granted by the Sikes Act, Fish and Wildlife Act, Water Resources Recreation Act and the Marine Mammal Protection Act of 1972, the Bureau attempts to insure that wildlife species receive equal consideration in decisions affecting habitat alteration.

This is accomplished by providing training and technical assistance to the Indian tribes and by furthering efforts to manage and utilize wildlife as the basis for increased tourism activities on Indian lands. Planning and technical management assistance is also available to all Federal land management agencies.

Mammal and Non-Migratory Bird Program Results

During fiscal year 1973, 12 species of big game animals such as elk, moose and bison utilized Bureau refuge lands for a total of 30,340,000 use days. Approximately 28,800 activity hours of public hunting opportunity were realized through Bureau-managed hunting programs on these species.

Technical and planning assistance for the management of mammals and non-migratory birds was provided to 15 Indian tribes in fiscal year 1973. Assistance to military reservations, national parks and others totaled 75 in the same period.

During fiscal year 1973, four areas totaling 2,724 acres were preserved for resident endangered species. These areas will also benefit other mammals and nonmigratory birds.

Other benefits derived include: maintenance of nationally significant species, many of which, as in the case of buffalo and longhorn cattle, are important components of the Nation's historical heritage; improvement of economic conditions in many communities, including Indian tribal lands; increased public recreational opportunity associated with wildlife and its habitat; accumulation of knowledge necessary to manage wildlife resources; increased public awareness of the Nation's wildlife heritage.

Animal Damage Control: The objectives of this program are:

(1) To develop control methods and provide assistance for the protection of agricultural, forest, range and wildlife resources from wildlife damage.

(2) To develop methods and provide assistance to military and civilian agencies in preventing bird-aircraft strikes.

(3) To develop improved damage assessment methods through research so that more accurate estimates on the extent of wildlife caused damages can be made.

(4) To develop methods and provide assistance to public agencies in suppressing wildlife-borne diseases such as rabies, plague and histoplasmosis.

(5) To develop methods and provide assistance in protecting industrial and urban facilities from wildlife damage.

Most predatory mammals, rodents and birds are generally not classified as game species and, consequently, are often not included in local and State wildlife management programs. These animals, however, often cause damages or create hazards which must be alleviated in a way that is not harmful to the environment. The Department of the Interior is charged with the Federal responsibility for controlling animal-caused problems by the Act of March 2, 1931 (46 Stat. 7 U.S.C., 426-426b), providing such assistance through the Bureau of Sport Fisheries and Wildlife.

Presidential Executive Order 11643, dated February 8, 1972, placed constraints on the aforementioned responsibilities. It prohibits on Federal lands (except those held in trust for Indians) and in Federal programs, the use of all chemical toxicants to control predator damage and the use of any chemical toxicant to control damage caused by nonpredatory animals, birds or reptiles which causes secondary poisoning effects. The prohibition, however, provides exceptions for the emergency use of chemical toxicants on Federal lands.

The Bureau's animal damage control program is conducted in cooperation with other Federal agencies, States, county and municipal governments and private individuals and associations. The actual field operations are carried out by cooperative employees under Bureau supervision. Various cooperative arrangements exist in the 15 western States where predator damage requires control. In many States the Bureau supervises State employees funded by the State and the livestock industry. In some States field work is conducted by Bureau employees, but is under a reimbursable plan whereby the cooperators fund the majority of the field operations.

Recent Animal Damage Control Program Results

	FY 1973 (Actual)	FY 1974 (Estimated)
Requests for wildlife-borne disease suppression responded to	1,124	770
Airports assisted in preventing bird-aircraft strikes	98	130
Agricultural resource protection requests responded to	33,586	35,500
Natural resource protection requests responded to	828	1,140
Urban facility protection requests responded to	4,805	4,800

Other benefits of the program include:

(1) Reduction of public health hazards caused by wildlife-borne diseases. As an example, projects for this purpose were conducted in New Mexico where prairie dog towns infested with plague were located within the city limits of Taos.

(2) Reduction in loss of life and aircraft damage due to bird-aircraft strikes. As an example, technical assistance was provided to correct a bird problem at the Tulsa International Airport in Oklahoma where a DC-10 struck a large number of seagulls.

(3) Improvement in the esthetic quality of the urban environment through the movement of urban bird roosts, and technical assistance on urban rodent control. Technical assistance is provided in discouraging birds from using particular areas where they contaminate or deface park benches, picnic tables, sidewalks, parked cars and buildings with their droppings. In addition, the Bureau supervises educational programs of commensal rodent control.

(4) Reduction of animal-caused damage to residential, commercial and industrial facilities. Technical assistance is provided on a daily basis to all States through information leaflets, oral communications and on-sight demonstrations to resolve problems in residential areas involving mammals and birds.

(5) Increased agricultural, forest and range production available for use by man. Direct operational and technical assistance is being provided throughout the United States to reduce agricultural, forest and range production losses from depredating wildlife.

(6) Protection of wildlife resources from indiscriminate control practices. Provide technical assistance and conduct field demonstrations on the effective and proper use of various control techniques, and conduct surveys to monitor the effects of other control operations on local wildlife species and the environment.

Cooperative Wildlife Research Units: Objectives of this program are:

(1) To further the wildlife research function of the Bureau and to assist in satisfying national wildlife research needs through active cooperation with other Federal, State and university research installations.

(2) To insure that an adequate complement of wildlife biologists with quality advanced training is available and provide a vehicle for updating and retraining Bureau employees.

(3) To promote conservation education and natural resources management.

(4) To provide technical assistance to conservation agencies in their wildlife management programs.

The Cooperative Wildlife Unit program was initiated in 935 to meet the need for professionally trained personnel in the field of wildlife conservation with secondary objectives of research and conservation education. Each wildlife unit is supported cooperatively by the Bureau, the Wildlife Management Institute, and by the respective State wildlife agency and state university. These units, located at 20 state universities, have evolved into an important component of the research arm of the Bureau and no longer serve primarily an educational purpose. In addition to providing highly trained personnel for teaching and research positions, they conduct research and supervise graduate research that complements and augments Bureau and State wildlife research programs.

Cooperative Wildlife Research Unit Program Results

In 1973 77 students receiving advanced degrees were provided support by the unit program. Over 80 percent of these graduates are now employed in wildlife or related positions. Unit staff and collaborators supervised research projects and published or presented 266 papers detailing research results. Over 400 research projects are underway at these units. These projects are concerned with waterfowl, wetlands, pesticides, wildlife diseases and parasites, animal damage control, endangered species, migratory birds, etc. All the subjects are of national interest.

The wildlife units, utilizing graduate students, provide the Bureau with the flexible capability of responding quickly to urgent research needs without the requirement of employing full-time professional scientists. They also improve the quality of training received by wildlife graduate students through close association with personnel of the management agencies. Active Bureau involvement in this program has facilitated the recruitment of quality professionals, and the units have also encouraged and facilitated close contact between the research arm of the Bureau and the academic community. The units also allow the Bureau to become aware of and responsive to the needs and problems facing States and regions where units are located.

Examples of Recent Accomplishments:

(1) Oil sumps associated with oil well drilling are often used as resting sites for migratory waterfowl. They are responsible for what is believed to be a large, but unknown, number of waterfowl losses each year. Steps are being taken to eliminate these death traps. By filling in, screening or removing the oil they contained, approximately 85 percent of the 2,200 oil sumps in California were eliminated. Three oil companies spent in excess of $3,000,000 in the cleanup or elimination of these areas. In Colorado conviction and fining of six oil companies of charges of killing migratory birds led to massive cleanup of oil sumps in that State.

(2) Measure to prevent DVE at refuges were taken. A laboratory method has been developed for rapidly diagnosing this disease, and a national contingency plan has been developed to combat future outbreaks.

(3) Waterfowl, feeding in marshes containing lead shot, ingest the shot and accumulate lethal doses of lead in their tissue. The best estimate available indicates that between two and three million waterfowl die due to this problem each year. Intensive field and laboratory tests have been completed on the use of soft steel as a substitute for lead in shotgun shells to prevent this loss. It is planned to phase out the use of lead shotgun shells over the next several years because an acceptable substitute is now available. An environmental impact statement setting forth the available data is being prepared to assess the impact and evaluate the alternatives of the action.

(4) In accordance with the requirements of the Marine Mammal Protection Act of 1972, status reports on marine mammals (polar bears, walruses, sea otters, manatees, dugongs) were published and submitted to Congress. These reports

indicated that polar bear numbers range between 10,000 and 20,000 animals, and sea otter numbers range between 101,050 and 121,050 in Alaska and between 1,200 and 1,500 animals off the Pacific Coast of the United States. Walrus numbers are estimated at 140,000 animals in the Pacific area and 25,000 animals in the Atlantic. American manatee numbers total between 2,000 and 4,000 individuals. Dugong numbers are unknown and this animal appears near extinction in some areas.

(5) Polar bears and walruses in their wanderings cross international boundaries. In order to manage this resource properly, cooperation with foreign countries is essential. In accordance with the Agreement of Cooperation in the field of environmental protection with the U.S.S.R., plans were developed to conduct cooperative studies on the polar bear and Pacific walrus with the U.S.S.R.

(6) The largest ring of traffickers in illegal animal pelts ever uncovered was broken by the apprehension and subsequent conviction of Vesely-Forte, Inc., in New York. In addition, 33 other defendents signed a consent injunction enjoining them from any further illegal international movement or trafficking in such skins. This action typifies the change in emphasis of Bureau law enforcement activities from first-line patrol to investigative work.

(7) A concentrated effort to establish a coyote population index in 17 western States was initiated. This cooperative effort with other Interior Bureaus and the State conservation agencies of the States involved will provide information that will give an indication of coyote population trends in the western United States. This information can be used to develop sound predator management programs.

(8) Blackbirds cause significant losses of sunflowers, sweet corn and sprouting corn in a number of areas in the United States. Field studies during the past year have indicated that the fright-producing agent, "Avitrol," can reduce losses of sunflowers and sweet corn by blackbirds. A second bird repellent, "measural," shows promise in preventing sprout pulling and damage to small fruits by birds. Tests are being conducted with these materials to determine if they can be registered for field use.

(9) During the past few years the Bureau has attempted to find a safe seed protectant that can be used to alleviate damage to planted seeds by forest rodents. The effort has been concentrated in the Pacific Northwest, primarily in the Douglas fir areas. During the past year, field tests in Oregon and Washington, located a promising seed protectant. Hopefully, registration will soon follow.

(10) As part of the Bureau intensified summer effort to protect livestock and poultry from predator depredations, 21 special evaluation projects were conducted to test the effectiveness of various mechanical animal damage control techniques. Evaluations of these projects showed that in many areas aerial hunting can effectively reduce a variety of predation problems.

(11) Following a bird-aircraft strike that was fatal to passengers in February 1973, recommendations were made to reduce the potential for bird-aircraft strikes at Dekalb-Peachtree Airport, Atlanta, Georgia. Information was also provided to reduce the likelihood of bird-aircraft strikes at Cannon Air Force Base, New Mexico, and the National Aviation Facilities Experimental Center, New Jersey.

(12) Wetlands, including coastal bays and estuaries, are being drained, filled or otherwise degraded at a rapid rate. These ecosystems are extremely productive and a key component of wetlands. It is important that land use planners and decision makers have the capability to evaluate alternative uses of this type land. The Massachusetts Wildlife Unit has developed and is refining as part of an ongoing effort a model to aid in long range planning and use of wetland areas.

3. Fisheries Resources: Fiscal Year 1974, $21,340,000; Fiscal Year 1975, $23,123,000; increase of $1,783,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $ +190,000	+6 perm.	$3,591,000	153	Anadromous program-in-increased production at 2 hatcheries; initial operation at 1 new hatchery
(2) +230,000	+7 perm.	13,999,000	560	Inland fisheries program-initial operation at 1 new hatchery; increased production at 2 hatcheries; operation of a new fishway
(3) +1,116,000	-	-	---	GSA leased space costs
(4) +247,000	-	-	---	Annualize increased pay costs, E.O. 11739
$$+1,783,000	+13 perm.			

Cost Factors Involved in Increases

(1) Six permanent positions, at an average annual rate of $13,700 ($82,000); purchase of equipment, fish food and other supplies, $108,000; for coastal anadromous fish production (total of $190,000).

(2) Seven permanent positions, at an average annual rate of $13,700 ($96,000); purchase of equipment, fish food and other supplies, $134,000; for Inland fisheries production (total of $230,000).

(3) Costs for leased space and related services by the General Services Administration, $1,116,000.

(4) Full-year funding for 4.77% pay increase for classified employees authorized in October, 1973, $247,000.

Need for Increases:

(1) Coastal anadromous fisheries, $+190,000 - 6 positions. Includes the following:

(a) Atlantic salmon, ($90,000 - 4 positions.)

The Atlantic salmon, once abundant in New England rivers, remain in extremely short supply. Cooperative restoration and management efforts involving the Bureau, States and private industry are improving streams and reducing adverse effects of water pollution and physical barriers. These habitat improvement efforts must be continued and stocking greatly accelerated if the restoration program is to be successful. An estimated three million salmon smolts (downstream migrant fish) will be required annually for the planned program in New England waters.

The increase is needed to make full use of available production capability at the new Green Lake National Fish Hatchery in Maine to take advantage of improving water quality and freedom of access to new nursery areas. In fiscal year 1975, production will be increased about 42,000 pounds to a total of 45,000. This will represent about 315,000 smolts, a significant step toward an immediate annual Federal and State requirement of one million smolts in Maine waters. An estimated 30,000

fisherman-days will be provided by the 45,000 pound total production. Because of the high demand for this prized fish, the Bureau of Sport Fisheries and Wildlife and the New England States have made extensive studies of the Atlantic salmon populations, their habitat requirements, the conservation and management practices required to restore populations, as well as the fishing pressure exerted. It has been through these studies that a requirement for an eventual total of 3 million Atlantic salmon smolts has been identified.

With a sustained production of three million smolts, the annual sport catch in New England could be some 30,000 adult fish based on a one percent return (considers mortality from smolt to adult stages, plus some catch on the high seas) to the creel. It is estimated that each returning adult salmon will provide about 10 fishermen-days, with each day valued at $9.00 1/. The 30,000 adult fish catch would therefore support about 300,000 fisherman days valued at $2,700,000 annually. Other related expenditures 2/, having a regional impact, such as gas, oil, food, lodging, bait, rental fees, guide services, and so on would be approximately 7 million dollars, for an annual total economic benefit in the range of 9-10 million dollars.

The United States Federal participation in salmon restoration began with establishment of the Craig Brook National Fish Hatchery in Maine in 1871; operations continue to the present time. Its maximum production is 300,000 smolts annually. The new Green Lake National Fish Hatchery, Maine, when completed, will produce 600,000 one-year smolts. In combination, the Craig Brook and Green Lake hatcheries wil make a significant contribution to a total need for three million smolts (one-year) annually to successfully establish fishable salmon runs in the Connecticut River (it and its tributaries involve Vermont, New Hampshire, and Massachusetts as well as Connecticut) and eight Maine streams.

(b) Pacific salmon,($100,000 - 2 positions.)

Pacific salmon fisheries have been drastically affected by exploitation of natural resources during the past 100 years. Logging of forests that protect high mountain watersheds and intensive agricultural practices have adversely affected water quality and spawning areas. Dams, first for irrigation purposes, then for power, and finally gigantic multi-purpose structures, have disrupted, and in some cases destroyed, traditional salmon spawning runs. The Columbia River system has been most seriously affected, but other river systems, such as the Sacramento in California, have also suffered. Fishery research and management investigations have shown that incorporation of fish passageways in dams, fish screens in irrigation diversions, and artificial propagation can partially offset the losses resulting from severely reduced natural reproduction. Benefits for both sport and commercial salmon fisheries result from these activities.

1. Kooskia National Fish Hatchery, Idaho ($85,000 - 1 position). . This hatchery produces spring chinook salmon to supplement natural reproduction and to maintain the Snake River anadromous fishery, one of the most important fisheries of the Pacific Northwest. Production will be increased by an additional 45,000 pounds to a total of 60,000 pounds or 900,000 fish supporting, a total of about 10,000 fishermen-days. With the increase requested, about one-half of the rearing ponds will be linked to a new water re-use system which will increase the productive capability of these facilities through better environmental controls.

1/ Principles and Standards for Planning - Water and Related Land Resources, Water Resources Council, Part 3, Fed. Register Sept. 10, 1973, effective, Oct. 25, 1973.

2/ 1970 data from the "Accelerated Atlantic Salmon Restoration Program" report compiled by the Bureau of Sport Fisheries and Wildlife, Boston, MA

When in full production, total output will approximate 1,300,000 fish weighing 180,000 pounds. Returns from that level of production are expected to provide 30,000 fishermen-days of sport angling, with a value of $270,000 at $9.00 per day. The value of 17,000 fish taken in commercial fishery in the ocean and rivers is estimated at about $200,000.

2. Warm Springs National Fish Hatchery, Oregon ($15,000 - 1 position). This hatchery is still under construction. Production, originally scheduled to begin in fiscal year 1974, has been deferred due to construction delays. A large hatchery building, ponds and a water supply system are presently under construction. The funds and position requested are needed for protection of facilities under construction. If work proceeds as now anticipated, production can begin in fiscal year 1976. Eventual production will be for stocking waters of the Warm Springs Indian Reservation, which will help restore anadromous runs which declined in recent years due to habitat and other changes. Improved fishing opportunities will result in economic benefits accruing to the Indians from sale of fishing permits, guide services, and related enterprises.

(2) Inland fisheries and reservoir program $230,000 - 7 positions . Increasing demand for recreation fishing, often working in combination with a declining natural resource, has resulted in a threat to the opportunity for a quality recreational experience that is currently available to the people of this country. Assistance that will assure the continued availability and use of this resource for the purpose of recreational and related commercial fishing is needed.

(a) Wolf Creek National Fish Hatchery, Kentucky ($45,000 - 2 positions). Wolf Creek Dam is a Corps of Engineers project and a key unit of the overall plan of development for the Cumberland River Basin. The Lake Cumberland area with its related fishing and other recreational uses will have a beneficial influence on the economy of Appalachia. The increase of $45,000 and 2 positions is needed to begin operation and purchase equipment for the Wolf Creek National Fish Hatchery. Production cannot commence until construction now underway is complete (expected to be in May, 1974). When fully operational, the Wolf Creek Hatchery will produce about 500,000 trout, weighing 150,000 pounds. This is planned for fiscal year 1978, assuming appropriations at desired levels are obtained. This production will support about 200,000 man-days of fishing annually. It is estimated that annual expenditures by these fishermen will generate about $1,200,000[1/] in goods and services to the economy.

(b) Marble Bluff Fishway and Dam, Nevada ($50,000 - 2 positions). The Marble Bluff Fishway and Dam are integral parts of the Bureau of Reclamation's Washoe Project, a multiple-purpose project involving irrigation, hydro-electric power, and flood control in the Truckee River watershed of Nevada. Under this project, approved by Congress in 1956, a fishway and dam are being constructed to facilitate passage of two endangered species, the Lahontan cutthroat trout and cui-ui lake sucker, to and from the Truckee River and Pyramid Lake for spawning and growth. This will help to maintain the fishing potential of one of the well known fishing areas of North America. In addition, the cui-ui lake sucker is an important entity in the cultural heritage of the Paiute Indian tribe. Provisions for artificial propagation as a step towards improved natural reproduction will become part of this project.

Under a cooperative agreement with the Bureau of Reclamation, the Bureau of Sport Fisheries and Wildlife has responsibility for operation and maintenance of the facility. While construction of the fishway will not be fully completed until July 1975, an increase is required for initial operation during part of FY 1975. It is expected that some direct economic benefit will accrue to the Pyramid Lake Paiute Indian Tribe as a result of employing Indians to maintain the fishway; no economic benefits are expected from fish populations in fiscal year 1975.

1/ See footnote on next page.

(c) Allegheny National Fish Hatchery, Pennsylvania - ($46,000 - 2 positions). The Allegheny hatchery produces brook, brown and rainbow trout and coho salmon. Its primary function will be production of trout for Allegheny National Forest and other waters in New York and Pennsylvania. A secondary function is to produce fish for stocking Lakes Erie and Ontario. The increased funding and staffing will facilitate a production increase of approximately 55,000 pounds to a total of 60,000 pounds (310,000 fish), supplying a resource that will provide about 30,000 fisherman-days. The Seneca Indian Nation has significant land holdings in the vicinity of the Kinzua reservoir, located in New York. The reservoir was created by the Kinzua Dam, Pennsylvania, constructed by the Corps of Engineers. Waters on the reservation will support about 20,000 catchable trout annually which will be supplied by the hatchery. Direct benefits to the Indians as a result of this stocking is estimated to be approximately $36,000. When construction is completed (fiscal year 1977, assuming full appropriations at desired levels) and full operations are underway, annual production will total 650,000 trout and salmon weighing about 125,000 pounds which will support about 174,000 man-days of fishing. The total economic value of this recreation resource is estimated at $1,044,000 1/.

(d) San Marcos National Fish Hatchery, Texas - ($89,000 - 1 position). This hatchery began limited production in fiscal year 1974. Increased funds are needed for office, laboratory, grounds and maintenance equipment. The hatchery will produce warmwater fish primarily for Federal reservoirs and small watershed impoundments. In addition it will also be operated as a Warmwater Fish Cultural Development Center to explore and test new techniques in feeding, disease prevention, weed eradication, harvesting methods, pond fertilization and other facets of warmwater hatchery operations. This is one of five units devoted to development of better, less costly fish. Findings of benefit to hatchery operations will be shared with State conservation agencies and commercial hatcheries, and should help improve the national fishery resource. When fully operational (fiscal year 1977, assuming full appropriations at desired levels), the hatchery is scheduled to produce 3,000,000 fish, weighing 35,000 pounds. This amount of production should support approximately 530,000 man-days of fishing annually, valued at $3,180,000 1/.

(3) GSA Space Costs, $1,116,000 - no positions. Beginning in fiscal year 1975, and in compliance with the Public Buildings Amendments of 1972, PL 92-313, agencies shall be charged for space and related services by the General Services Administration at rates approximately equivalent to commercial charges. The amount requested is required to reimburse GSA for office, special, and storage space currently occupied by the Bureau and effectively utilized to achieve program objectives.

(4) Pay Act Costs, $247,000 - no positions. The total requested for the Bureau is $857,000, of which $247,000 is included in this activity. The increase is needed to annualize the October 1973 increased civilian pay costs granted pursuant to Executive Order 11739. The additional funds are necessary to provide for continuing Bureau operations and maintenance at the fiscal year 1974 program level and does not provide for increasing the program.

1/ The economic values for the above inland fisheries program outputs are based on a rate of $6.00 per fisherman-day. This is from the "Principles and Standards for Planning - Water and Related Land Resources, Water Resources Council, Part 3, Fed. Register Sept. 10, 1973, effective, Oct. 25, 1973". This study shows a range of $3.00 to $9.00 for the value of a fisherman-day, with the $6.00 rate selected as the average value for the combined salmon-trout-warmwater fisheries involved in the inland fisheries program. For the coastal anadromous program, the $9.00 rate was used for all salmon fishing.

Program of Work

The goal of the Fishery Resources activity is to assist in meeting the public demand for recreational fishing while maintaining the Nation's fishes and their habitats at a level and in a condition that will assure the continued survival of these natural resources.

To accomplish this goal, the Bureau places emphasis on the development, management, and protection of interstate and international fisheries, such as anadromous species, fisheries of the Great Lakes, interstate river and reservoir systems, fisheries on Federal lands, and on perpetuation of endangered species such as the Lahontan cutthroat trout and the cui-ui sucker of Pyramid Lake, Nevada. Fish will be produced at 91 hatcheries for stocking these waters. Two protective fish screens and fishways will also be operated to facilitate upstream movements of migratory fish and to keep them out of waters that become unsuitable due to irrigation, industrial and domestic uses. Five development centers and one training school will be operated to improve fish cultural technology and practices. Research will be carried out at 13 laboratories and 9 field stations to improve natural sport fish productivity, increase efficiency of production of hatchery fish, determine effects of environmental contaminants on fishery resources, and to develop more effective methods of controlling undesirable fishes. Technical assistance in the management of sport fisheries will be provided by fishery biologists at 33 field stations to Indian tribes and to Federal, State, and other landowners. Cooperative fishery units are maintained at 25 universities to train fishery biologists and to carry on research.

It will be the policy of the Bureau of Sport Fisheries and Wildlife to allocate or distribute the output of national fish hatcheries in the following priority:

1. Primary obligation will be in the stocking of international waters such as the coastal and Great Lakes areas, in areas owned and managed by Federal agencies, and Indian lands.

2. Federal lands managed by the States such as some of our National Forest waters.

3. Interstate and multi-state waters such as the Colorado River system.

4. State-owned and managed waters.

5. Privately-owned waters.

Fishery Resources Funding

Program	FY 1974 Estimate	FY 1975 Estimate	Change
Coastal Anadromous fisheries	$3,591,000	$3,781,000	$+190,000
Great Lakes	2,367,000	2,367,000	
Inland fisheries and reservoirs	13,999,000	14,229,000	+230,000
Cooperative fishery units	1,383,000	1,383,000	
GSA space costs	-	1,116,000	+1,116,000
Pay Act Costs	-	247,000	+247,000
Totals	$21,340,000	$23,123,000	$1,783,000

Coastal anadromous fisheries: The objectives are:

(1) To provide fish passages and protection facilities, and produce and stock fish of the species required to maintain the resource.

(2) To assess needs for additional conservation, development and enhancement activities.

(3) To develop comprehensive plans on a State, regional, or watershed basis which satisfy management objectives, taking into account multiple uses and stresses, and related resource programs.

(4) To produce and distribute approximately 35 million anadromous fish at hatcheries funded by the Bureau (excluding production from hatcheries funded by Corps of Engineers and National Marine Fisheries Services).

The coastal anadromous fish program is carried out through a series of Bureau activities in 16 coastal States. These include fish production, stocking, disease and nutrition research, management studies and inter-governmental training programs. Principal species in the program are coho and chinook salmon, steelhead trout, sea-run cutthroat trout, striped bass (rockfish), Atlantic salmon, hickory shad, American shad, Alabama shad, smelt, sturgeon, and sheefish. Some of the areas where the work is done are the Connecticut, Delaware, Penobscot, Merrimack, Brandywine, and Hudson Rivers in the Northeast; major river systems of the Pacific coast such as the Columbia, Snake and Sacramento Rivers, and of Southeast Alaska; Choctawhatchee Bay in Florida, the Santee-Cooper, Savannah, Ogeechee, Atchafalaya Rivers and the Mississippi Sound in the Southeast.

Through the efforts of the Bureau at 13 hatcheries, the expected annual production amounts to about 35,000,000 fish, weighing in excess of 1,000,000 pounds. Research projects on nutrition, disease prophylaxis and treatment, and effects of pollutants are performed by means of 20 studies at four laboratories and field stations. For example, the Cortland, New York research facility has developed a satisfactory synthetic diet for Atlantic salmon fry. At the Leetown, West Virginia laboratory, refinement has been made of plaque assay techniques permitting one test identification of the 8 known fish viruses.

Coastal Anadromous Program Results

	FY 1973 (Actual)	FY 1974 (Estimated)
1. Number of fish produced	33,000,000	35,000,000
2. Pounds of fish produced	900,000	1,000,000
3. Number of technical publications and reports	25	28
4. Aid to Indians (Projects)	18	18
5. Fisherman-days resulting from program	1,025,000	1,150,000

Above data do not include numbers and pounds of fish produced and fishermen-days resulting from grant-in-aid projects under Anadromous Fish Conservation Act, P.L. 89-30-4; these are included under The Construction and Anadromous Fish Appropriation section. They also do not include production from hatcheries operated by the Bureau but funded by the Corps of Engineers, Bureau of Reclamation, and National Marine Fisheries Service.

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Great Lakes fisheries: The objectives are:

(1) To improve the quality, abundance, and productivity of the sport and related commercial fishery resources of the Great Lakes by providing Federal leadership in participation with other Federal agencies, Canada, the States, and the fishing industry.

(2) To support and participate in the Great Lakes Fishery Commission's program and to assist in the development and implementation of a long-range State-Federal-Provincial comprehensive plan for research and management of the Great Lakes fishery resources.

(3) To assess the condition of fish stocks and recommend measures for their utilization and protection.

(4) To reduce sea lamprey populations to a level where self-sustaining populations of lake trout and other species are established.

The Great Lakes form the largest group of freshwater lakes in the world. They have a surface area of 95,000 square miles, of which 61,000 square miles are in the United States. More than 30 million people live in the U.S. portion of the Great Lakes Basin, and half of these are located in urban areas. Thus, these waters are important economically and recreationally to the inhabitants of the Basin. It is estimated that the U.S. Great Lakes will provide 20 million angler-days of fishing in 1974 valued at $126 million (figure 1).

The Bureau's Great Lakes Fishery Program is an integral part of a large, complex program for conserving international fishery resources of the Great Lakes. It is complicated by international agreements and State management jurisdiction within State boundaries. The Department of the Interior has broad responsibility to conduct many activities that relate to program objectives. Among these are the gathering and analysis of data pertaining to fish stocks and harvest; research on the aquatic environment; stocking of fishes from national fish hatcheries; conducting sea lamprey research and control (as an agent of the Great Lakes Fishery Commission which is funded by the Department of State); participating in planning water development projects; and providng grant-in-aid funds (primarily Anadromous Fish Act) to the Great Lakes States for hatchery construction, stream improvement, and stock assessment.

Figure 1. Great Lakes Fisheries Program Results

	FY 1973 (Actual)	FY 1974 (Estimated)
1. Number of man-days fishing provided	19,000,000	20,000,000
2. Number of fish produced for stocking	4,400,000	5,000,000
3. Number of streams treated that contain sea lampreys	65	71
4. Number of technical publications and reports produced	49	56

A vigorous program will provide for increased management effectiveness of the Great Lakes States and the Province of Ontario; improved quality of the fish; increased protection of the sport and commercial fishery from pollutants and predation of the sea lamprey; and increased sport fishing opportunities and production of food fishes. All of these combined will lead to a sustained economic growth of tourist and recreation communities bordering these waters.

The lake trout restoration program is showing definite progress. In Lake Superior, naturally produced lake trout are common and generally make up 5-6 percent of the catch. In some areas, native lake trout outnumber hatchery-planted fish. There is widespread evidence of lake trout spawning in Lake Michigan, but no young-of-the-year trout have been found. This evidence of natural reproduction is particularly significant as the resource was virtually wiped out before the restoration program started.

Inland fisheries and reservoirs: The objectives are:

(1) To increase reservoir and stream fish production by applying good management and enhancement practices.

(2) To increase the precision of estimating the amount of sport fishing by identifying and cataloging the various reservoir types; gathering and analyzing reservoir fish production data nationally; developing a system that will allow comparative evaluations of reservoir production and yield, and encourage fish production and angler harvest studies by State agencies.

(3) To create greater fishing opportunities by altering existing fish populations, introducing new species, obtaining access to closed waters, and by restoring depleted fisheries.

(4) To develop new and improved techniques for sport fishery management by conducting research in fish genetics, nutrition, taxonomy and biological and chemical controls.

(5) To improve sport fishing opportunities for the nation's anglers by providing technical assistance and hatchery-produced fish for the management of waters on Federal, State, and other lands.

(6) To provide technical assistance in the management of sport and commercial fisheries on Indian lands to allow for their intensified utilization while maintaining the environmental integrity of the total resource.

The nation's inland fresh waters that are classified as suitable sport-fish habitat, excluding the Great Lakes, comprise nearly 58,000 square miles. In 1970, more than 29 million citizens went fishing in these waters. The total fishing effort amounted to 592 million recreation-days and $3.7 billion was spent in pursuit of the sport.[1/]

The Bureau and State fish and game agencies have cooperated in the effort to improve the nation's inland fisheries program. Bureau efforts include the provision of technical assistance for the management of waters on 326 areas including 71 Indian reservations, national wildlife refuges and military areas, national forests, and national parks. Also included is the production and distribution of 132,000,000 fish weighing about 5,000,000 pounds from national fish hatcheries. Ten fishery research laboratories produced technical publications and reports relating to fresh water fishing programs. The Bureau's program requires close coordination with the fish and game agencies of all 50 States and many other Federal and private entities.

1/ 1970 National Survey of Fishing and Hunting

Inland Fisheries and Reservoir Program Results

	FY 1973 (Actual)	FY 1974 (Estimated)
Number of fish produced for stocking	127,000,000	132,000,000
Weight of fish produced for stocking	4,500,000	5,000,000
Man-days of fishing supported	10,000,000	11,000,000

Cooperative Fishery Units: The objectives are:

(1) To conduct fishery research to meet resource management needs.

(2) To train fishery biologists to solve the problems of fishery resources research and management.

(3) To provide expertise to fishery personnel by conducting workshops, seminars, and extension related services.

Twenty-five Cooperative Fishery Units are located at universities throughout the United States. The units, administered in cooperation with the Bureau, State fish and game agencies and universities, are assisting in the conservation of the Nation's fishery resources. Each unit has its own program responsive to the area needs of the cooperating agencies. Some are highly specialized in certain research areas, while others are general in scope. The units work closely with representatives of different agencies to help insure the perpetuation of the Nation's fish stocks and aquatic resources.

During fiscal year 1973, unit personnel supervised and participated in 270 research projects and taught courses attended by more than 1,000 students. As a result of this effort, 63 advanced degrees were awarded. The units, because of their cooperative agreements with several agencies, have the capabilities to respond to many different challenges in fishery resource management. The following data indicate the Cooperative Fishery Units committment to current fishery problem areas.

Research Topic	Number of Units Participating
Pollution: effects of oil and dispersants; pesticide contamination of fish food; affects of heavy metals, silt, and sewerage	13
Genetics: predictability of the heritable traits of growth in catfish and bluegill; chromosome and gene analysis in channel catfish; ability of steelhead to inherit tolerance to mercury; assessment of similarities of DNA in salmonids; population genetics in oysters.	10
Socioeconomics: evaluation of urban fisheries; culturing and marketing of farm-reared fish; angler harvest and evaluation of sport fisheries	10
Thermal additives: effects on sport fishery; effects on fish reproduction; effects of catch rates; and effects on fish migration	9
Fish culture: use of cage culture of trout and catfish; artificial reproduction of walleye; artificial diets; effects of diets on reproduction; and effects of pesticides on hatching success	8

Research Topic (cont'd)	Number of Units Participating
Biological-chemical-physical controls: involve factors affecting electrofishing; control of vegetation by fish; light intensity and growth of fish; effect of Antimycin A on pond bottom organisms and plankton	8
Diseases and parasites: development and transmission; sublethal effects on fish	6
Estuarine ecology: mostly in NE and NW - include investigation of salinity on ecology of the grunnion, reproduction and migration of several species, including Atlantic croakers, American shad, smelt, alewife, and softshell clams	6
Stream channelization, timbering, and land management practices: effects of logging on fish relationships, of clearcutting on nutrient cycles; of highway construction and strip mine reclamation	9
Rare and endangered species: studies of pygmy sculpin, Suwannee bass, Arctic grayling, and several of the trouts of the Great Basin	4

Examples of Recent Accomplishments:

(1) Fishery assistance on project areas, which include Indian lands, military reservations, and other Federal lands, has been successful in providing approximately 11,000,000 fisherman days to the public. Such assistance also results in economic benefits to Indian tribes from fish utilized by the Indians themselves, as well as from the use of Indian lands managed for sport fishing and from sales of permits, guide services and concession operations.

(2) The artificial spawning channels at Tehama-Colusa, California, constitute an effective system for mitigation of Pacific salmon spawning habitat loss. In 1974 approximately 4,620,000 out-migrant fall chinook salmon will be produced.

(3) Assistance to Indian tribes planned for 1974, and projected for 1975 is as follows for the coastal anadromous program:

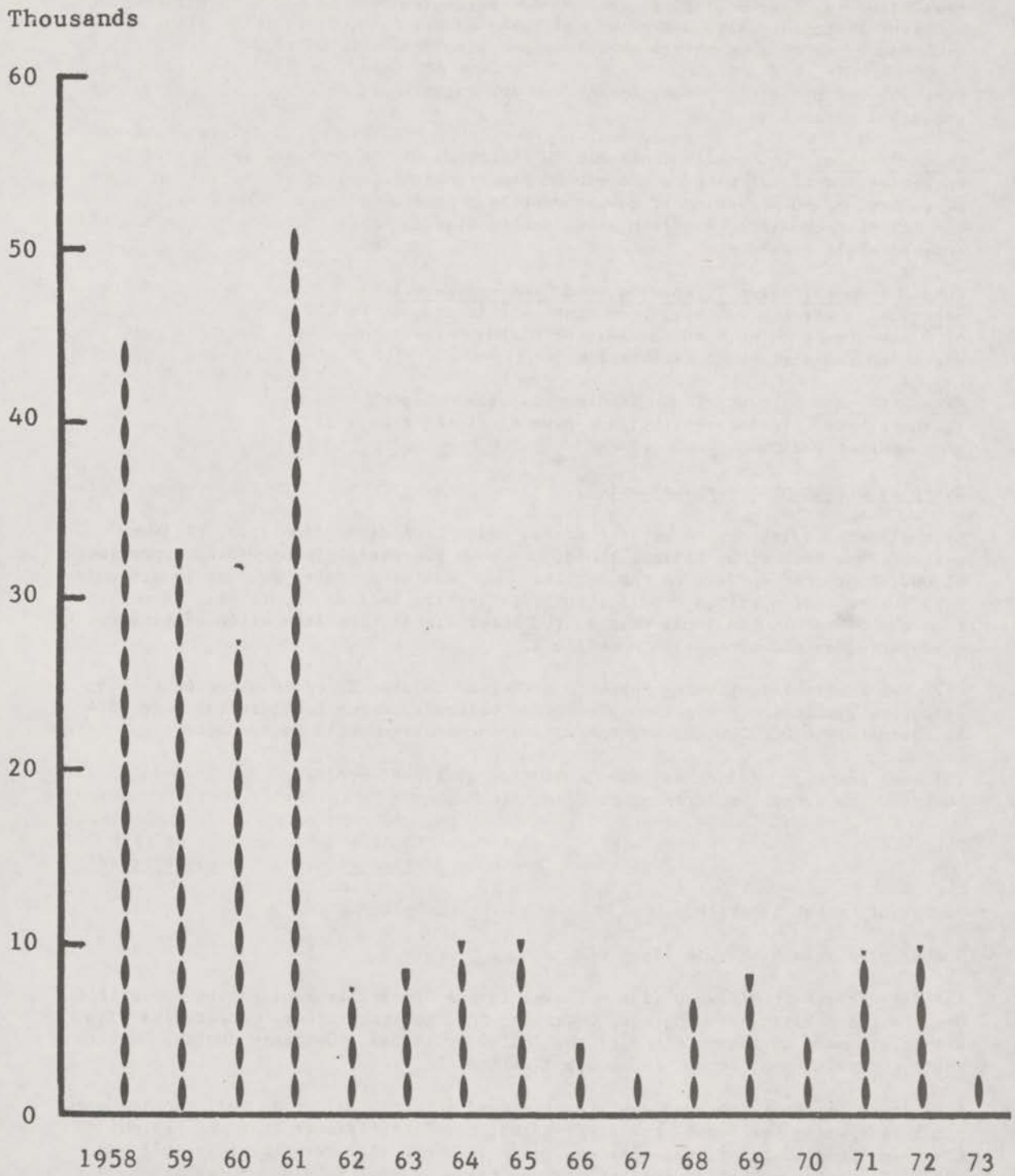
	FY 1974 (Estimated)	FY 1975 (Projected)
Number of tribes benefited	11	11
Number of Bureau hatcheries involved	9	9

Benefits accrue from Bureau fish releases in the Bonneville Pool, above Bonneville Dam, to the Yakima, Warm Springs, Umatilla, and Klickitat tribes. Anadromous fish plants are made on reservations of the following tribes: Quileute, Makah, Muckleshoot, Quinalt, Hoh, Lummi, and Squaxim Island.

(4) There has been improved capture of tagged Atlantic salmon as well as increased total returns in the Penobscot River of Maine. Slightly more than one percent of the salmon tagged and released as smolts in 1970 and 1971 were taken in 1972 and 1973. The total number of Atlantic salmon taken as adults by sport fishermen, and in a trap operated by the Atlantic Sea Run Salmon Commission, at Bangor Dam, has risen from less than 50 fish in 1967 to 312 in 1973.

(5) During the 1950's, the primary method of controlling sea lampreys in the upper Great Lakes was by the use of electromechanical wiers or barriers operated in lamprey spawning streams. By the late 1950's, chemicals (TFM) were discovered that are

Figure 2.



Annual assessment barrier catches of adult sea lampreys at eight weirs along the south shore of Lake Superior.

highly toxic to larval lampreys in streams and are much less toxic to other fishes. Chemical control with TFM was highly successful and replaced the barrier method. However, the U.S. and Canadian agents retained selected barriers to assess adult lamprey runs in Lakes Superior and Huron. The U.S. operates eight assessment barriers (figure 2). The final 1973 count of adult sea lampreys at the eight U.S. assessment barriers on Lake Superior was the second lowest on record. The 1973 catch of 2,847 lampreys represents a 70 percent decrease from 1972 and less than 6 percent of the 50,975 taken in 1961 before control became effective.

(6) The primary method of successfully controlling sea lampreys in the Great Lakes is by treating the lamprey producing streams with the lampricide TFM to kill the larval lampreys. In 1971, we were informed by the Environmental Protection Agency that certain research must be initiated as a requirement for continued registration and use of this chemical. During 1973, the required investigations of the toxicity of TFM to fishes, invertebrates, and algae were completed.

(7) The lampricide TFM is quite effective in controlling sea lampreys in moving waters of Great Lakes tributary streams. However, TFM is not very effective in slow or still waters such as are found in embayments and backwaters. Over the past 10 years, Bureau scientists have been experimenting with a fish toxicant, antimycin. The Bureau's preliminary tests of a new bottom formulation of antimycin indicate promise of controlling larval lampreys in quiet or still waters.

(8) Research on the effects of thermal pollution indicate that:

a. Residue accumulations of DDT and mercury in fishes increase as water temperatures increase.

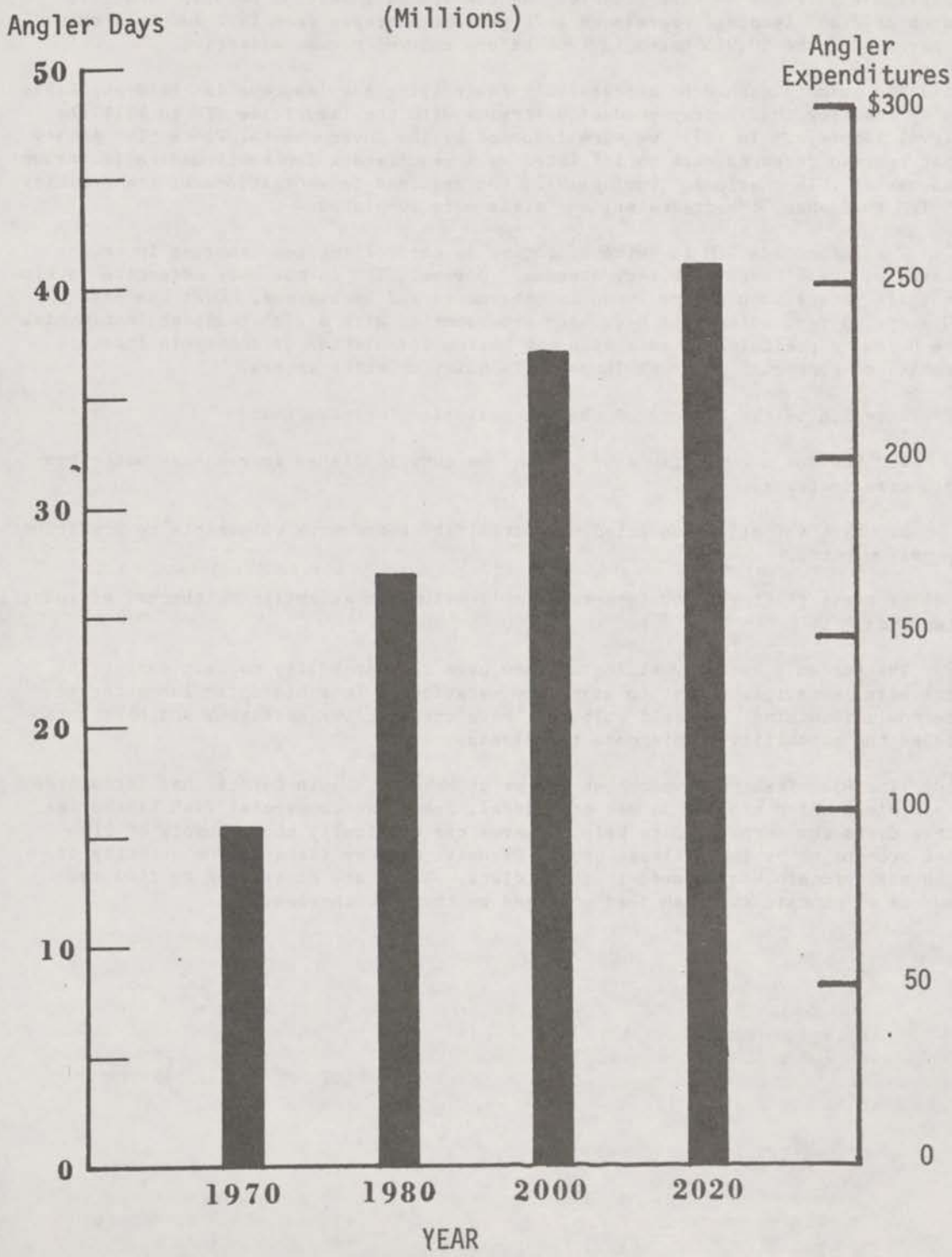
b. Lake whitefish subjected to thermal shock are more vulnerable to predation by yellow perch.

Both of these findings have important implications in establishing thermal effluent standards.

(9) The Bureau's hatchery biologists now have the capability to help combat the duck viral enteritis threat to migratory waterfowl. Four biologist laboratories are now maintaining duck cell cultures, have specific DVE antiserum and have established the capability to diagnose the disease.

(10) The Diet Testing Development Center at McNenny, South Dakota, has formulated 3 new diets which are now in use at Federal, State and commercial fish hatcheries. These diets are formulated to help conserve the critically short supply of fish meal brought on by the collapse of the Peruvian anchovy fishery. The quantity of fish meal protein was reduced in these diets. Tests are continuing to find new sources of protein for fish feed utilized by these hatcheries.

FISHING PRESSURE PROJECTIONS FOR THE U.S. GREAT LAKES



Sources: Draft, Great Lakes Basin Framework Study, Michigan Department of Natural Resources, 1972, and National Survey of Fishing and Hunting, Resource Publication 95, Bureau of Sport Fisheries and Wildlife, 1972.

4. Endangered species: Fiscal Year 1974, $4,660,000; Fiscal Year 1975, $5,527,000 increase of $867,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+300,000	+5 Perm	1,868,000	22	Develop implementation mechanism for the 1973 Act.
(2)	+358,000	+14 Perm	1,703,000	77	Increase enforcement of endangered and threatened species regulations nationally and internationally.
(3)	+193,000	.....	193,000	--	GSA space costs.
(4)	+16,000	.....	16,000	--	Annualize increased pay costs, E.O. 11739
	+867,000	+19 Perm			

Cost Factors Involved in Increase

(1) $100,000 for 5 permanent positions to develop necessary regulatory mechanisms operational techniques, and management systems to begin implementing portions of the Endangered Species Act of 1973; $150,000 for contract studies to obtain basic information essential to develop threatened and endangered species lists and provide status reports; and $50,000 for supporting equipment and operations.

(2) $280,000 for fourteen permanent positions and $78,000 for essential equipment and operations to begin fulfilling new regulatory and enforcement authorities under the 1973 Act.

(3) General Services Administration space costs (PL 92-313) $193,000.

(4) Full year funding for 4.77 percent pay increase for classified employees authorized in October 1973.

Need for Increase:

(1) Develop implementation mechanisms for 1973 Act, $300,000 -5 positions: New authorities and responsibilities under the 1973 Act include:

(a) Listing all (world-wide) species, subspecies and lesser taxonomic groupings of plants and animals presently "endangered" or "threatened" in the foreseeable future with becoming endangered, and (b) providing the protection, conservation, management, systems development, and coordination needed to enhance listed populations.

Specific implementing actions include:

A. Develop standards, rules, regulations, systems and agreements needed to (1) register plant and animal importers and provide a permit system for legitimate trade in endangered or threatened plants and animals, (2) list and delist plants and animals, (3) sign state cooperative program agreements, and (4) develop cooperative working arrangements with the Smithsonian

Institution and Departments of Commerce and Agriculture.

B. Revise current endangered species lists to conform with the new Act, including: (1) develop "endangered" and "threatened" lists of plants and animals, (2) provide scientific and common name or names of listed plants and animals, (3) list area where each plant or animal is "endangered" or "threatened", and (4) provide special regulations needed to protect and conserve plants and animals in the "threatened" category. This massive effort can only be started in Fiscal Year 1975.

C. Develop necessary priorities and began operational actions to enhance recovery of "endangered" and "threatened" species, subspecies, and smaller taxonomic groups of plants and animals. This effort too can only be started in Fiscal Year 1975 with the additional resources.

Where possible, highly specialized one-time or short-term work will be contracted. This may include developing (1) initial endangered and threatened species lists, with supporting data, (2) status reports of species or groups of species known to be critically endangered in order to develop and implement recovery plans, and (3) needed management systems and control methods.

(2) Increase enforcement of regulations, $358,000 - 14 positions:

Another Bureau responsibility is to aid in the protection of foreign species of fish and wildlife. As an aid to enforcement of Federal law, the Endangered Species Act requires that all fish and wildlife must be imported through one of eight ports of entry designated by the Secretary of the Interior. Such shipments may arrive via personal baggage of travelers, air freight, ocean cargo, mail, and by truck and rail from Canada and Mexico. Imports including both live animals and their parts or products are monitored.

The problem of making inspections at a designated port is compounded by actual entries occurring at several widely separated locations (e.g., mail facilities, shipping docks, and airports), and the perishable nature of the animals. Since air shipments are heaviest at night while other channels have a continuous volume, sufficient agents are needed for more continuous coverage to avoid either illegal entries or inhumane treatment of animals.

The volume of fish and wildlife importations is also increasing rapidly as the following table illustrates:

WILDLIFE IMPORTED INTO THE UNITED STATES

	1969	1970	1971	1972
Live Wildlife				
Mammals	117,000	101,000	103,000	114,000
Birds	572,000	688,000	995,000	689,000
Fish	73,695,000	83,867,000	98,972,000	112,291,000
Mollusks and Crustaceans	1,939,000	10,768,000	5,928,000	3,844,000
Amphibians	339,000	573,000	392,000	583,000
Reptiles	1,394,000	2,110,000	1,404,000	2,504,000
Total, Live Wildlife	78,056,000	98,107,000	107,794,000	120,025,000
Number of Individual Importation Declarations	13,000	17,000	20,000	18,000

In addition to the need for more continuous port coverage, this growth in fish and wildlife importations requires additional agents at designated ports of entry. The recent Honolulu Special Agent position has enabled the Bureau to check over 1-million additional wildlife items.

To facilitate importation of wildlife from Canada and Mexico, 26 Canadian ports of entry and seven Mexican ports are special exceptions to the eight designated ports. Without trained Bureau agents to conduct inspections, animal shipments across these borders receive little attention. The problem is particularly serious to endangered spotted cats, both live and skins used in fur trade, being smuggled in along the Mexican border. In order to increase surveillance along the Mexican and Canadian borders and Hawaii, seven additional Special Agent positions and three clerical positions are required.

In addition, a law enforcement liaison agent will be established for overseas liaison. Poaching and illegal trade occur in many forms of wildlife, including the very valuable furs of the spotted cats. The agent would work with the countries' conservation and law enforcement agencies to develop effective laws, and enforcement methods. In addition to determining the need for full-time assignment of agents, he would establish and maintain contacts throughout Africa and South America to mount effective international investigations into the illegal trafficking in endangered wildlife. In recent cases, prosecuted, international trade in jewelry made from hawksbill turtles (so-called "tortoise shell") and in the furs and hides of spotted cats was prevalent. Increased capability to undertake and coordinate international investigations will lead to apprehension and conviction of such violators.

Capability must also be available for determining trends, methods and operational techniques of violators, intelligence on organized rings, areas where the greatest number of violations are occurring, and the reasons for violations in specific areas. Data collection and analysis will require two analysts and one clerical position.

(3) GSA space costs: $193,000 - no positions:

Beginning in Fiscal Year 1975 and in compliance with the Public Buildings Amendments of 1972, PL 92-313, agencies shall be charged for space and related services provided by the General Services Administration at rates approximately equivalent to commercial charges. The amount requested is required to reimburse GSA for office, special and storage space currently occupied by the Bureau and effectively utilized to further efforts toward achieving program objectives.

(4) Increased pay costs, $16,000:

The total requested is $857,000, of which $16,000 is included in this activity. The increase is needed to annualize the October 1973 increased civilian pay costs granted pursuant to Executive Order 11739. The additional funds are necessary to provide for continuing Bureau operations and maintenance at the FY 1974 program level and does not provide for increasing the program.

Program of Work:

The program goal is to restore an animal or plant species or subspecies, which has been identified as being threatened with extinction, to the point at which it is once again a viable component of its ecosystem and to prevent additional species or subspecies from becoming endangered.

To accomplish this goal, actions are directed toward the following objectives:

(1) Develop a nationally coordinated endangered species program by enlisting the aid and services of other Federal, States, and private agencies and organizations in the implementation of mutually developed endangered species programs.

(2) Conduct research studies and surveys to determine the status of native and foreign threatened species, the problems confronting them, and management techniques needed for restoration.

(3) Develop and keep current accurate endangered and threatened species lists, through consultation with individuals, agencies, and governments throughout the world who are knowledgeable about the status and needs of various species, their status and needs.

(4) Manage Bureau owned lands to provide maximum benefits for endangered animals and provide management assistance on non-Bureau lands where this is possible and practical.

(5) Develop and implement recovery plans for restoration of endangered native species by (a) identifying limiting factors, (b) proposing corrective measures, and (c) making recommendations for land acquisition, management actions, and other efforts to restore the species.

(6) Increase the scope and effectiveness of importation regulations and their enforcement in order to prevent the United States from contributing to the diminution of foreign resources.

(7) Provide up-to-date information services on endangered species to the public, news media, and educational organizations.

(8) Help foreign countries resolve their own endangered species problems by (a) expanding our program to train foreign nationals, (b) providing assistance in conducting surveys to determine the status and problems confronting foreign endangered species, (c) providing expert consultation services when requested by foreign countries, and (d) developing treaties, protocols and conventions to provide basic rules and regulations for protecting and conserving endangered species as prescribed by the 1973 Act.

(9) Acquire, as rapidly as possible, those lands and waters providing essential habitat for the continued existence of endangered species.

ENDANGERED SPECIES FUNDING

Program	FY 1974 Estimate	FY 1975 Estimate	Change
Planning and coordination	1,568,000	1,868,000	$+300,000
Research	840,000	840,000	--------
Management	907,000	907,000	--------
Enforcement	1,345,000	1,703,000	+358,000
GSA space costs	---------	193,000	+193,000
Annualized pay costs	---------	16,000	+16,000
	$4,660,000	$5,527,000	$+867,000

Planning and coordination:

One of the most critical and difficult responsibilities is coordination of the extensive, but diverse interests in, and activities related to, endangered and threatened species.

The International Union for the Conservation of Nature and Natural Resources and many other private organizations (local, regional, national, and international)

are substantially involved in endangered species work. Several foreign governments have endangered species programs--the Soviet Union, Kenya, France, the United Kingdom, and New Zealand are prime examples. Many more foreign governments showed substantial interest in endangered species at the recently concluded conference which produced a Convention on International Trade in Endangered Species of Wild Fauna and Flora. In addition to the Interior Department, the Agriculture and Defense Departments are making substantial contributions to the national and international endangered species movement. At present, there are about 35 States--plus at least two cities--Cincinnati, Ohio and Fort Wayne, Indiana--that have endangered species laws and/or programs. Proper coordination and communication with this plethora of organizations and programs will minimize possible duplication. This capability has improved in Fiscal Year 1974 and will be further advanced in Fiscal Year 1975.

Sound basic data on individual threatened animals are provided by status surveys being conducted on about one hundred native and foreign animal species, involving both population estimates and habitat status determinations. This information is absolutely prerequisite to updated endangered species lists, required by the 1973 Act, and to develop initial recovery plans. Recovery plans identify all actions needed to restore the species from an endangered or threatened status. The Office of Endangered Species and International Activities provides the recovery plan format, guides preparation, and insures their satisfactory completion and implementation. These plans guide assignment of specific objectives and priority actions among cooperators to assure that scarce resources bring the most urgently needed results. Approximately 10 to 15 individual species recovery plans will be completed and implemented during Fiscal Year 1975.

The Office of Endangered Species and International Activities has substantial responsibility for implementing several international treaties. The Convention on International Trade in Endangered Species of Wild Fauna and Flora resulted from an eighty nation conference concluded March 3, 1973, in Washington, D. C. Since this Convention is just now being implemented, administrative and enforcement responsibilities will increase greatly as it progresses. The Office was also instrumental in planning and implementing cooperative programs with the Soviet Union, under the 1972 environmental agreement with the U.S.S.R., and in successful negotiations and an agreement with Canada, Sweden, Norway, and the Soviet Union to protect polar bears. These activities will continue and responsibilities increase with implementation.

The Endangered Species Act of 1973 authorizes several forms of assistance to foreign countries to help them manage their wildlife resources, to attempt insured survival of endangered species, and to preclude species from reaching endangered status. Many countries of the world, including a host of "under-developed nations", are endangered species conscious and their concerns are growing. By training foreign biologists in the basic skills of wildlife management and endangered species conservation, countries can help themselves with a multitude of environmental, ecological, and wildlife conservation problems they now face which only further deteriorate without remedial action.

A growing public concern for the environment, wildlife, and endangered species has given this program a high visibility. Mail exceeds 25,000 pieces annually and is growing. The welfare of many species may depend upon public attitude and support. Therefore, a public information effort serves both the program and the public.

Research:

Research is needed to develop and implement recovery plans. Research into captive propagation of certain high priority species and into methods to reintroduce stock into the wild is important where natural recovery of the base population is highly unlikely with only habitat management. Propagation work at the Patuxent Wildlife Research Center concerns whooping cranes, black-footed ferrets, Aleutian Canada geese and masked bobwhite quail, and in Puerto Rico near the Puerto Rican parrot's wild habitat. The Bird and Mammal Laboratory does taxonomic investigations and literature surveys, and supervises research conducted by outside contractors, including status surveys of certain foreign species or groups of species. Factors which depress populations of priority species or prevent recovery of the population to safe levels are researched in the field.

Fishery management and research personnel are investigating the Cui-ui sucker in Pyramid Lake, Nevada to facilitate artificial propagation, re-establish a lake population, and determine requirements for re-creating a viable wild population.

Research is also being conducted to evaluate the effects of commercially collecting wild fishes in South America and parts of Africa for aquarium use. The purpose is to prevent depletion and endangerment of wild populations of (aquarium) fishes before they reach the "point of no return".

Management:

Thirty-three endangered species and many threatened species are found on Bureau lands administered under the National Wildlife Refuge system. A few endangered species are found almost exclusively on refuge lands. A substantial part of the total resources and land management efforts of several refuges are devoted to endangered species. These include the whooping crane at Aransas National Wildlife Refuge in Texas, the Key deer on the National Key Deer Refuge in Florida, the Sonoran pronghorn on the Cabeza Prieta Wildlife Range in Arizona, the Delmarva Peninsula fox squirrel at Blackwater National Wildlife Refuge in Maryland, the Florida Everglades kite on the Loxahatchee Refuge in Florida and the Laysan duck, Laysan finch, Nihoa millerbird, and Nihoa finch on the Hawaiian Islands Refuge. Endangered or threatened species and subspecies are found on about 131 National Wildlife Refuges. Approximately 67 endangered species reside on all lands administered by the U.S. Department of the Interior. Activities include improvement of wintering habitats for migratory species, development of food patches, construction of nesting facilities, and specialized management required by a particular species.

Enforcement:

All fish and wildlife (including their parts and products) which are imported into the United States, with the exception of shellfish or fishery products imported for commercial purposes, are subject to inspection and clearance by agents of the Bureau or Customs Officers. To facilitate enforcement and to reduce the costs of administering laws restricting and controlling wildlife importations, specific regulations are now in effect. The Bureau also has responsibility to aid foreign countries to protect their fish and wildlife species by shutting off the flow into the United States of nearly all endangered species taken in violation of foreign law.

Recent Examples of Accomplishments:

(1) Enactment of the Endangered Species Act of 1973.

(2) A 1973 edition of the "Red Book" of Threatened Wildlife of the United States was published.

(3) Eighty-one nations concluded a treaty for the control of international trade in endangered species in Washington on March 3, 1973. The treaty was signed by the United States.

(4) Two environmental statements were prepared on the Endangered Species Conservation Act of 1969 and the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

(5) Threat to the hard-pressed Devil's Hole pupfish was eased when the Court granted temporary Departmental control of water levels. Establishment of permanent water levels is now under consideration by the Court.

(6) Background information and comments from States and Federal agencies needed to publish the first proposed listing of 28 mussels and land snails and one brackish water snail was completed.

(7) Status review completed on world's sea turtles; endangered listing proposed for the green and loggerhead sea turtles.

(8) Efforts indicate the endangered cui-ui in Pyramid Lake, Nevada can be maintained on-site by artificial propagation until the dam on the spawning stream can be by-passed.

(9) A proposed rulemaking was published December 20, 1973, that prohibits the importation of all fish and wildlife except low risk species that do not threaten environmental damage.

(10) Several New York jewelry firms entered into consent agreements to refrain from dealing in $250,000 worth of tortoise shell jewelry made from the hawksbill turtle, an endangered species.

(11) Circumpolar nations met in Oslo, Norway and drafted a polar bear treaty, which the United States signed.

(12) The red wolf recovery program has been fully staffed and implementation of the recovery plan initiated.

5. Interpretation and Recreation: Fiscal year 1974, $5,670,000; fiscal year 1975, $6,089,000; an increase of $419,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	+$160,000	+6 perm	$1,526,000	39	Improve Native liaison and fish and wildlife information capabilities in Alaska
(2)	+ 219,000	....	219,000	....	GSA space costs
(3)	+ 40,000	....	40,000	....	Annualize increased pay costs E.O. 11739
	+$419,000	+6 perm			

Cost Factors Involved in Increases

(1) Two permanent positions at an average annual rate of $25,000 ($50,000); one position at an annual salary rate of $9,000; three positions at an average annual rate of $10,333 ($31,000); 1 and 1/3 man-years of seasonal labor at an annual rate of $9,000 ($12,000); travel expenses, $16,000; purchase of equipment, supplies, operation of equipment and contractual services, $42,000.

(2) Costs for leased space and related services provided by the General Services Administration.

(3) Full year funding for 4.77 percent pay increase for classified employees authorized in October 1973.

Need for Increase:

(1) Improve Interpretive Capabilities in Alaska, +$160,000 - 6 positions.

(a) Liaison with Alaska Natives ($80,000 - 4 positions).

Currently, there are 18 national wildlife refuges, totaling nearly 20 million acres, dedicated to the preservation of valuable fish and wildlife habitat in Alaska. The Alaska Native Claims Settlement Act (ANCSA) allows each Native village within or adjacent to these existing refuges to select up to three townships per village from these refuges. In addition, the Act required that land where the Federal interest predominates, such as with the vast migratory bird resource, be identified and that recommendations concerning the disposition of these lands be submitted to the Congress in December 1973. Based on extensive studies, the Secretary of the Interior recommended in December that nine areas totaling 31,990,000 acres be added to the National Wildlife Refuge System under the provisions of ANCSA.

The situation is complicated by the requirement of ANCSA that existing refuge lands later patented to Native villages must continue to be managed in accordance with refuge rules and regulations. Management of both existing and new refuge areas requires expanded interpretive and advisory programs and necessitates the formulation and implementation of cooperative agreements with the villages.

Many of the Natives in Alaska do not speak, read or understand English effectively. Consequently, they either misunderstand the reasons for or ignore most statutes and Executive and Public Land Orders relating to resource use in Alaska. This situation greatly amplifies the urgency for developing an effective liaison with Eskimos, Aleuts and Indians.

To overcome the difficulties outlined above, a public affairs specialist and three bilingual Alaska Natives are needed. Specifically, this staff will be used to communicate Bureau goals, objectives, policies and regulatory procedures; develop a mutually advantageous understanding of environmental concerns and desirable management and use practices; secure cooperation in the management and enforcement activities designed to preserve the wildlife resource; and assist with work related to land acquisition and resource management.

Frequent contact with individuals and groups of Natives on an informal basis and through formal meetings will be essential to the success of this undertaking. In addition, there is a need for continued contact with other Federal agencies which have programs in the State, State agencies, Alaska Native organizations and other concerned groups.

(b) Improve Fish and Wildlife Information Capability ($80,000 - 2 positions).

Public interest in the wildlands and the living natural resources of Alaska has been stimulated by passage of such legislation as the Alaska Native Claims Settlement Act, the Marine Mammals Protection Act, and the Wilderness Act, and by such resource development proposals as the Alaskan pipeline. As work to implement the provisions of this legislation progresses and as resource development accelerates, public requests for general or specialized information will expand.

Alaska, the Nation's last largely unaltered wildland and wildlife resource, is approaching a period when many crucial decisions affecting the future of the resource will be made. In order for society to make the best land use and resource allocation decisions, the public must have information concerning the benefits and impacts of the alternative changes under consideration. The Bureau must be able to provide such information concerning the resources for which it is responsible. There is no other national source of information about the fish and wildlife resources in Alaska other than the Bureau.

The Bureau does not have a professional public information staff in Alaska to handle general inquiries or to coordinate responses to the press, radio, TV and motion picture media on major resource issues, decisions or values. A public affairs officer and secretary are needed in the Anchorage Area Office to develop, coordinate and transmit information related to those fish, wildlife and related resources where there is a substantial Federal interest or responsibility.

(2) GSA Space Costs, +$219,000 - No positions.

Beginning in fiscal year 1975 and in compliance with the Public Buildings Amendments of 1972, PL 92-313, agencies shall be charged for space and related services provided by the General Services Administration at rates approximately equivalent to commercial charges. The amount requested is required to reimburse GSA for office, special and storage space currently occupied by the Bureau and effectively utilized to further efforts toward achieving program objectives.

(3) Increased Pay Costs, +$40,000 - No positions.

The total requested is $857,000 of which $40,000 is included in this activity. The increase is needed to annualize the October 1973 increased civilian pay costs granted pursuant to Executive Order 11739. The additional funds are necessary to provide for continuing Bureau operations and maintenance at the FY 1974 program level and do not provide for increasing the program.

Program of Work:

The goal of this program is to expand understanding and appreciation of fish and wildlife wildlands ecology, and man's role in his environment, utilizing the special competences of Bureau personnel as well as Bureau facilities. A related goal is to provide visitors to Bureau installations with a safe, enjoyable experience oriented toward enhancing their understanding of natural environments.

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These goals are accomplished by providing a wide range of outdoor opportunities on Bureau lands, emphasizing interpretive experiences, environmental study areas, and wildlife-oriented recreation activities, such as wildlife observation and hunting and fishing. Currently, approximately 65 percent of visits to national wildlife refuges, national fish hatcheries and research laboratories are for wildlife-oriented activities. Current information concerning fish and wildlife and its relationship to man is made available to the general public through specialized media and publications.

Interpretation and Recreation Funding

	FY 74	FY 75	Change
Fish and Wildlife Information	$1,366,000	$1,526,000	+$160,000
Environmental Education	443,000	443,000	---
Interpretation	2,117,000	2,117,000	---
Recreation	1,744,000	1,744,000	---

The objectives of this program are:

(1) To make Bureau lands available for scientific studies by colleges, universities, professional organizations, scientific societies and individuals.

(2) To make Bureau lands available as environmental study areas for use by schools (kindergarten through grade 12) for formal educational activities concerning wildlands ecology and man's role in his environment.

(3) To enhance the general public's basic understanding of fish, wildlife and wildlands with improved interpretive programs on Bureau lands.

(4) To enhance the general public's understanding of the issues involved and the impacts of alternative land and water allocation decisions by providing information about fish and wildlife and its relationship to man.

(5) To provide fish and wildlife-oriented recreation activities on Bureau lands that are compatible with wildlife management programs and to reduce the uses that are not fish and wildlife oriented.

(6) To determine how fish and wildlife resources are used, and the values placed on these resources, by society.

This activity is authorized by the Fish and Wildlife Act of 1956 and the Refuge Recreation Act of 1962 which call for a program to provide public opportunity for understanding, appreciation and use of fish and wildlife resources. Gradual reductions of recreation activities not related to or compatible with fish and wildlife resources is continuing. As a result of this changing program emphasis, non-program related uses such as camping, swimming and boating are decreasing. For example, it is estimated that camping will decrease from 11,950,000 activity hours in FY 1973 to 11,700,000 activity hours in FY 1974 and similarly for swimming to decrease from 3,375,000 to 2,750,000 activity hours.

Youth Conservation Corps camps are located on Bureau refuges and fish hatcheries. YCC activities are funded primarily with transfer monies. The cost of planning for and supervising the camps is partially funded with Bureau monies. The use of Bureau lands, facilities and professional services is vital to the wildlife and wildlands interpretation, environmental education and related work project involvement by YCC enrollees.

Interpretation and Recreation
Recent Program Results
(Millions)

	73 Actual	74 Estimate	75 Estimate
Wildlife-oriented visitor hours	36.8	38.3	39.6
Interpretive program visitor hours	2.5	3.3	3.7
Environmental education participant hours	.6	.7	.7
TOTAL program-oriented visitor hours	39.9	42.3	44.0
Nonwildlife-oriented recreational visitor hours	24.9	22.8	22.3
TOTAL all visitor hours provided	64.8	65.1	66.3
Estimated number of leaflets produced (individual leaflets)	2.1 (227)	2.3 (230)	2.8 (240)

Examples of Recent Accomplishments:

(1) Eleven recently established national wildlife refuges will provide additional program opportunities. Included is the 49,000 acre Dismal Swamp National Wildlife Refuge, a gift from the Nature Conservancy. This refuge encompasses a unique ecosystem which will provide new program opportunities for scientific study and public enjoyment. The Tinicum Environmental Center, located partially in the City of Philadelphia within one of the Nation's metropolitan areas, will provide an excellent opportunity for urban dwellers to readily participate in wildlife related interpretive programs.

(2) While successfully reducing nonwildlife-oriented recreation, redirection of effort has resulted in improved interpretive and environmental education program facilities and services. Elements of this program are: interpretive trails, visitor information centers, wildlife observation and demonstration areas, and special events, such as art and decoy shows and promoting National Hunting and Fishing Day. Wildlife observation structures at Aransas and Wheeler Refuges have recently been completed and are providing a unique viewing experience for the visiting public. A new aquarium has been completed at the Meridian National Fish Hatchery in Mississippi.

New interpretive exhibits and information leaflets have been developed. Environmental education materials, study sites and teaching plans have been developed in conjunction with teacher workshops conducted in cooperation with school districts and teachers in the vicinity of the refuges.

(3) A Bureau sign production center is now in operation resulting in the more efficient production of program-related signs.

6. Administration: Fiscal year 1974, $3,623,000; fiscal year 1975, $3,913,000; increase of $290,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Program	Positions	Explanation
(1)	$+254,000	...	$254,000	...	GSA space costs
(2)	+36,000	...	36,000	...	Annualize increased pay costs, E.O. 11739
	+290,000	...			

Cost Factors Involved in Increases

(1) Costs for leased space and related services provided by the General Services Administration.

(2) Full year funding for 4.77 percent pay increase for classified employees authorized in October 1973.

Need for Increase:

(1) GSA Space Costs, $254,000 - No positions. Beginning in FY 1975 and in compliance with the Public Buildings Amendments of 1972, Public Law 92-313, agencies shall be charged for space and related services provided by GSA at rates approximately equivalent to commercial charges. The amount requested is required to pay GSA for occupied and used space by the Bureau for this activity.

(2) Increased pay costs, $36,000. The total requested is $857,000, of which $36,000 is included in this activity. The increase is needed to annualize the October 1973 increased civilian pay costs granted pursuant to Executive Order 11739. The additional funds are necessary to provide for continuing Bureau operations and maintenance at the FY 1974 program level and does not provide for increasing the program.

Program of Work. This activity funds two Bureau programs: executive direction and administrative and related support services. Functions conducted in these two programs cross the entire organizational and program management structure of the Bureau and impact on operations at the Washington Office, regional, and area offices, and field station levels. Among the goals of the activity is to develop the executive leadership and managerial competence that will achieve the most effective and efficient response to national program objectives and responsibilities of the Bureau.

The executive direction program includes directorate level positions in the Washington and regional offices, the planning and budget office staff, and secretarial support positions. The directorate level positions carry full responsibility for planning, developing, funding, executing, and evaluating all Bureau programs; six of these positions in the Washington Office serve as the national managers for all Bureau programs and are accountable to the Director for accomplishment of the annual operating objectives developed for the programs. The planning and budget office staff provides support in the development and operation of systems and procedures integrating the various management processes needed to institutionalize management by objectives on a Bureauwide basis. Personnel at both the Washington and regional office levels represent the Bureau and the interests of fish and wildlife resources with other Federal agencies, the Congress, and outside organizations.

The administrative and related support services program includes specialist positions that require expertise in such areas as housekeeping functions of hiring and servicing employees; organizational analysis; employee training and development; contract administration; procuring property and services; financial management; processing, recording and reporting financial transactions; generating data for management evaluation; and administering all legal, regulatory and policy requirements in the financial, business management and personnel areas.

In addition to the amounts directly budgeted for these programs, an assessment for support services is applied to permanent indefinite appropriations, appropriation transfers, and advances and reimbursements. In the case of funds that are available primarily for salaries and expenses, the assessment rate is about 5.3 percent; for funds available for other purposes, such as land acquisition and payments to States, the rate is about 0.45 percent. Also, annual definite appropriations are assessed at about 0.4 percent. Under Resource Management, this will involve activities other than Administration. All assessments are predicated on management evaluation comparing the program needs with those for administrative services. In sum, assessments total a conservative 1.7 percent of all Bureau programmed funds. An analysis of total funding is shown on page 61. For economy and efficiency, certain essential program functions are consolidated and the financing is administered on a joint basis under the Directorate. These involve talents and expertise for which operational activities would have some need but not full use. However, they could be sustained jointly for full utilization by all programs. Examples are ADP systems development and programming, training, equal employment opportunity, occupational safety and health, servicing correspondence from Congress and coordinating basic legislation.

The objectives are:

To create more effective mechanisms for furthering Bureau-State cooperation in resource decisionmaking and in the use of collective management inputs for the benefit of living natural resources.

To improve development and utilization of the human resources of the Bureau.

To develop organizational arrangements in the Washington and regional offices which effectively support program management by objectives.

To refine planning and management processes and procedures to support program budgeting and management and to develop mechanisms to monitor progress toward objectives and to evaluate program performance.

To facilitate all Bureau operations by providing housekeeping services in an efficient, effective, and timely manner; fostering use of best methods and techniques of business management; assuring observation and response to all legal, regulatory, and policy requirements.

The outputs include a clear, well-defined understanding of the Bureau's mission, goals, and objectives; a common management concept to govern program performance; delineation of responsibility and accountability among management levels; creation of effective and productive organizational arrangements; and an effective representation of the Bureau to the Department, OMB, the Congress, and others.

Examples of Recent Accomplishments:

(1) Centralized ADP processing by end of FY 1974 of Bureau management and regulatory reports.

(2) Development of an improved automated financial and output reporting system on a trial basis to support new program management processes. Extension of this system is under consideration.

(3) Completion of regional boundary adjustments, by the close of FY 1974, to facilitate field operations pursuant to the President's Standard Federal Regions program.

(4) Reorganization of Washington Office directorate positions and realignment of staff offices to support more effectively the program management-by-objectives system adopted by the Bureau in FY 1974.

Administration
Sources of Total Funding
(In $000)

Appropriation	FY 1974 Amount Available	FY 1975 Estimate	Increase (+) or Decrease (-)
Direct funding:			
Resource management-administration	$3,623	$3,913	$290
Other funding:			
Resource management--assessed amounts	330	330	...
Construction and anadromous fish	30	30	...
Migratory bird conservation account	270	280	10
Miscellaneous appropriations (permanents)	869	890	21
Transfer appropriations:			
Bureau of Reclamation	20	22	2
Corps of Engineers, Civil	174	239	65
Other	38	43	5
Advances and reimbursements	170	170	...
Total, direct funding	$3,623	$3,913	$290
Other funding	1,901	2,004	103
Grand Total	$5,524	$5,917	$393

Appropriation Title: Resource Management

	1973 actual	1974 estimate	1975 estimate
PERSONNEL SUMMARY			
Total number of permanent positions	3,374	3,377	3,500
Full-time equivalent of other positions	376	378	383
Average paid employment	3,437	3,440	3,510
Average GS grade	8.8	8.9	9.0
Average GS salary	$13,989	$14,076	$14,244
Average salary of ungraded positions	$10,011	$10,541	$11,120

ITEMIZATION OF ESTIMATE

Department of the Interior
Appropriation Title: Resource Management — Bureau of Sport Fisheries and Wildlife

	1973 Actual	1974 Estimate	1975 Estimate	Increase or Decrease(-)
Program and Financing				
Total obligations	$80,926,511	$90,488,609	$105,595,000	$15,106,391
Unobligated balance lapsing	86,034	....	....	....
Transfer to Operating Expenses, Public Building Service, General Services Administration (PL 93-143, Sec. 609, 10/30/73)	176,739	175,391	....	-175,391
Receipts from reimbursable program	-4,549,784	-4,500,000	-4,500,000	....
Proposed wageboard supplemental	....	-330,000	....	330,000
Proposed supplemental for civilian pay raise	....	-4,947,000	....	4,947,000
Appropriation	76,639,500	80,887,000 1/	101,095,000	20,208,000
Obligations by Objects				
Direct obligations				
11 Personnel compensation	50,796,180	53,615,000	55,881,000	2,266,000
12 Personnel benefits	4,609,013	4,981,000	5,085,000	104,000
13 Benefits for former personnel	30,435	....	....	....
21 Travel and transportation of persons	2,066,520	2,313,000	3,330,000	1,017,000
22 Transportation of things	554,445	600,000	1,070,000	470,000
23 Rent, communications, and utilities	2,377,485	2,325,000	6,809,000	4,484,000
24 Printing and reproduction	298,130	350,000	602,000	252,000
25 Other services	8,125,157	10,232,000	11,290,000	1,058,000
26 Supplies and materials	8,095,154	8,435,609	11,329,000	2,893,391
31 Equipment	2,677,607	3,702,000	6,299,000	2,597,000
32 Lands and structures	203,936	....	....	....
41 Grants, subsidies, and contributions	4,072	....	....	....
42 Insurance claims and indemnities	10,132	....	....	....
Total program costs, funded	79,848,266	86,553,609	101,695,000	15,141,391
94 Change in selected resources	-2,908,391	....	....	....
Subtotal	76,939,875	86,553,609	101,695,000	15,141,391
95 Quarters and subsistence charges	-563,148	-565,000	-600,000	-35,000
Total, direct obligations	76,376,727	85,988,609	101,095,000	15,106,391

Appropriation Title: Resource Management

		1973 Actual	1974 Estimate	1975 Estimate	Increase or Decrease (-)
Obligations by objects					
	Reimbursable obligations				
11	Personnel compensation	$2,783,063	$2,840,000	$2,910,000	$70,000
12	Personnel benefits	174,559	180,000	185,000	5,000
21	Travel and transportation of persons	214,517	200,000	220,000	20,000
22	Transportation of things	172,397	150,000	170,000	20,000
23	Rent, communications, and utilities	64,346	50,000	....	-50,000
24	Printing and reproduction	1,758	....	....	....
25	Other services	534,305	483,000	419,000	-64,000
26	Supplies and materials	366,777	350,000	350,000	....
31	Equipment	264,072	275,000	275,000	....
	Subtotal	4,575,794	4,528,000	4,529,000	-1,000
95	Quarters and subsistence	-26,010	-28,000	-29,000	1,000
	Total reimbursable obligations	4,549,784	4,500,000	4,500,000	....
99	Total obligations	80,926,511	90,488,609	105,595,000	15,106,391

1/ Includes Alaska pipeline supplemental, $450,000.

CONSTRUCTION AND ANADROMOUS FISH

Highlight Statement

The objective of the construction and anadromous fish program is to provide land, buildings, and other facilities for the conservation, management, and investigations of the nation's sportfish and wildlife resources; and stimulate the conservation, development, and enhancement of the nation's anadromous fish and the fish in the Great Lakes that ascend streams to spawn.

The 1974 appropriation provided funds for continuing construction on six national fish hatcheries, two national wildlife refuges, one fishery research laboratory; installation of domestic waste disposal systems on 24 wildlife refuges; effluent treatment facilities at four national fish hatcheries; and planning, design, and construction of the fishery research and development center located in Northeastern Pennsylvania.

Pollution abatement facility construction continued at three national fish hatcheries in FY 1974 with funds previously appropriated. Prototype facilities were constructed at these locations--Quinault NFH, Washington; Jones Hole NFH, Utah; and Bozeman NFH, Montana. There will be careful and detailed evaluation studies made of these facilities to provide a sound basis for determining construction types and amounts of funding needed for each hatchery requiring effluent treatment. Final determination at each site will also depend on water quality standards and guidelines that are to be issued by the Environmental Protection Agency by October 1974.

The 1975 request for fishery resource projects includes continuation of construction at one national fish hatchery and one fishery research laboratory, and initiation of construction at a new national fishery research and development center. It also includes rehabilitation or construction of facilities at four Alaskan national wildlife refuges and three national wildlife refuges in the conterminous United States, and long-range plans and environmental impact assessment of one. Domestic waste disposal systems will be constructed at 13 national wildlife refuges and at Patuxent Wildlife Research Center.

Increased funding for anadromous fish projects will permit funding of ten new projects in eight States and continue 17 projects in 15 States.

Appropriation, 1974		$8,126,500
Unobligated balance from prior years		3,595,169
Total available for obligation		11,721,669
Decreases		
Construction and rehabilitation	$9,720,384	
Anadromous fish	2,001,285	11,721,669
Subtotal		....
Increases		
Construction and rehabilitation	6,264,000	
Anadromous fish	2,333,000	
Budget estimate, 1975		8,597,000

Analysis by Activities

		Amount Available 1974	Estimated Total Available	Fiscal Year 1975 Estimated 1974 Unobligated Balance	Budget Estimate	Total available 1975 compared to total available 1974
1.	Construction & rehabilitation	$ 6,327,384	$9,657,000	$3,393,000	$6,264,000	$+3,329,616
2.	Anadromous fish	$ 2,001,285	$2,333,000	....	$2,333,000	$+331,715
		$ 8,328,669	$11,990,000	$3,393,000	$8,597,000	$+3,661,331

1. Construction and rehabilitation - $6,264,000

(a) New construction - $5,724,000. The requested funds will provide for continuation of construction at the new Green Lake National Fish Hatchery, Maine, for initiating construction of the fishery research and development center in Northeastern Pennsylvania, for continuing construction at the LaCrosse Fish Control Laboratory, Wisconsin, and for design and construction of new wildlife refuge facilities.

(1) Green Lake National Fish Hatchery, Maine - $1,900,000. Funds are requested in fiscal year 1975 for the next phase construction of facilities: a mechanical building (water heating and cooling plants for fish rearing, fire control system, standby power, fuel storage, and electric substation), a water intake treatment facility (aeration and mixing, filtration, degassing, and ultraviolet treatment), a broodstock pool, rearing pools, completion of the hatchery building, domestic water and sewerage plants, site preparation, and equipment. On completion of this work, annual output will be approximately 600,000 one-year smolts or 400,000 two-year smolts.

The Atlantic salmon, historically abundant in all major New England streams, is one of the most sought after sport fish in the world today. It is also of economic importance to commercial fishermen on an international basis. The interest is such that many governmental and private agencies and organizations are involved in the conservation and management - these include six federal government agencies, four international commissions and organizations, four national conservation organizations, three Canadian provinces, and eight States. Millions of dollars are being invested by all of these identities in fish passage facilities, devices to cool thermal effluents from nuclear power plants, pollution abatement measures, and fish production and management efforts. Private utility companies will finance construction of fish passage facilities at five mainstem dams on the Connecticut River by 1977. It is estimated that passage facilities collectively will cost eight to ten million dollars. Additionally, the Canadian Federal Government is spending two million annually for Atlantic salmon. All of this indicates the interest in, and degree of commitment to the total Atlantic salmon program.

The United States Federal participation began in 1871 with establishment of the Craig Brook National Fish Hatchery in Maine; operations continue to the present time. Its maximum production is 300,000 smolts annually (salmon ready to return to sea). The new Green Lake National Fish Hatchery, Maine, when completed at a total cost of about $4,700,000, will produce 600,000 smolts. In combination, the Craig Brook and Green Lake hatcheries will make a

significant contribution (30 percent) to a total need for three million smolts (one year) annually to successfully establish fishable salmon runs in the Connecticut River (it and its tributaries involve Vermont, New Hampshire, and Massachusetts as well as Connecticut) and eight Maine streams.

The sustained production goal for the total Atlantic salmon program is three million smolts. With that production, the annual sport catch in New England could be some 30,000 adult fish based on a one percent return to the creel. The 30,000 adult catch would support about 300,000 fisherman days valued at $9.00 per day[1/], or a total of $2,700,000 annually. Other related expenditures[2/] having a regional impact such as gas, oil, food, lodging, bait, rental fees, guide services, and so on would be approximately 7 million dollars, for an annual total economic benefit in the range of 9 - 10 million dollars.

For the Craig Brook and Green Lake hatcheries, with a combined total production of 900,000 smolts (after Green Lake construction is complete), the annual, total economic benefit is approximately $3,000,000. Against this is weighed a total investment of approximately $4,700,000 construction costs for Green Lake (Craig Brook has been completed for some time), and annual operating costs of about $240,000 for the two hatcheries. Considering the need and the favorable benefit/cost ratio, it is essential that construction at Green Lake be completed as soon as possible.

(2) National Fishery Research and Development Center, Northeast Pennsylvania--$1,000,000. A total of $500,000 was appropriated in Fiscal Years 1973 and 1974 for site selection, land acquisition, and planning and design of this facility. Site selection surveys and studies of water supply resource have been completed and the Bureau has an option to purchase its priority site. The research program requirements are being developed and engineering and architectural planning are now underway. The requested funding is for first-phase construction of the Center to include site preparation; services; sanitary and laboratory waste disposal facilities; and utilities structures.

A part of the Bureau's responsibility for technical leadership and assistance is the development of techniques, methods, and procedures which will increase efficiency and productivity of national, State, and other fish hatcheries.

Increasing costs of fish production as well as rapidly growing demand for recreational fishing require that all fish production facilities operate at maximum efficiency to meet needs for greater, more diversified, and superior quality output.

A new national fishery research and development center in northeast Pennsylvania will be ideally suited to studies which will optimize fish culture methods for selected fish species and develop fish transportation techniques which will increase survival and result in greater return of released fish to the creel.

Benefits from the Center will be both local and national. Experimental fish will be available for release into local public waters after they have served a research function. Information developed at this Center will be utilized

1/ Principles and Standards for Planning - Water and Related Land Resources, Water Resources Council, Part 3, Fed. Register, Sept. 10, 1973, effective Oct. 25, 1973.

2/ 1970 data from the "Accelerated Atlantic Salmon Restoration Program" report compiled by the Bureau of Sport Fisheries and Wildlife, Boston, Massachusetts.

in national, State, and private hatcheries to reduce costs of production, increase hatchery outputs, improve quality of fish stocks, increase survival of released fish, and reduce costs and increase efficiency of transportation from hatcheries to release sites. Ultimate benefits will be in increased recreational fishing potential on public waters.

(3) La Crosse Fish Control Laboratory, Wisconsin--$2,400,000. The estimate covers next-phase construction at the new La Crosse laboratory and will provide for additional site work, water supply and waste water treatment facilities, and construction of the laboratory, administration and auxiliary buildings with support services. On completion of this work, it will be possible to transfer some research operations from the old laboratory to this new research center. Facilities at the existing La Crosse Fish Control Laboratory date from 1924 and are entirely inadequate to support the research necessary to develop information required by recent legislation for clearance of chemical compounds. Failure to obtain required clearance for essential chemicals may preclude their use in the near future, jeopardizing the programs of commercial fish-producing industries (catfish, trout, salmon, etc.), State and National fish hatcheries, and State and Federal fishery management.

(4) Alaska Facilities--$200,000. Alaskan wetlands provide habitat for nearly 40 percent of the ducks, most geese and all the whistling swans nesting in the United States. Sea birds and other shore and water birds occur in unique variety and abundance. In addition, Alaska's wildland habitat supports numerous species of mammals which are not found elsewhere or are present in such low numbers in other regions of the Nation that their existence there is threatened.

The 18 national wildlife refuges in Alaska include nearly 20 million acres of habitat located in the remotest parts of the State. Only four professional employees are stationed on these areas to protect and manage this important habitat. The funds requested will be employed to develop or upgrade facilities to Bureau standards so that additional staff can be stationed in these remote locations to increase the level of management on Bureau land.

Aleutian Island NWR ($70,000). Two of three modular buildings obtained from the Atomic Energy Commission at Amchitka and presently on site at Adak will be converted to residences. The availability of these facilities will allow establishment of a field office in the western portion of the Aleutian Islands National Wildlife Refuge.

Izembeck NWR ($40,000). An aircraft is essential at the Cold Bay headquarters to manage this refuge since roads are virtually non-existent and charter aircraft are not available. A Super Cub on floats is justified for this refuge in the Resource Management appropriation. Because of frequent high winds and generally adverse weather conditions, a hangar costing an estimated $40,000 is essential for the operation of this plane. Funds are requested to construct this facility.

Kenai NWR ($30,000). Construction of a hangar is needed to prevent vandalism to the two aircraft which are stationed at this station. A hangar will also markedly improve the efficiency of winter aircraft operations.

Clarence Rhode NWR ($60,000). The Chivak field station is the principle field headquarters for the Yukon Delta refuges. Facilities at this station presently consist of an inadequate warehouse and a small cabin providing cramped and submarginal living quarters. The lack of adequate storage necessitates that field equipment be transported to and from the refuge headquarters in Bethel each field season. Funds are requested to replace these substandard facilities with a combination bunk house and warehouse building in order to provide for more efficient field operations.

(5) National Wildlife Refuges--$224,000. When new refuges are acquired, certain minimum facilities are usually required in order to make the units functional. The preparation of long-range plans and environmental impact assessments of proposed actions is also a top priority on newly acquired units. Funds provided in this estimate will initiate planning and construction of management facilities on four refuges as follows:

San Francisco Bay NWR, California ($60,000). Careful planning and the required environmental impact assessment is vitally important prior to any major physical work on the unique and complex natural system to be included in this refuge. This unit will consist of nearly 22,000 acres of salt marsh situated along the sourthern perimeter of the San Francisco Bay. The densely populated bay area is expected to generate high public use of this refuge when it becomes operational. Funds requested will provide for development of the master plan including an environmental impact statement required by the Environmental Protection Act.

Salton Sea NWR, California ($60,000). This refuge, established primarily to prevent agricultural crop depredations by waterfowl in the Imperial Valley of California, is not able to fully achieve this objective due to an incomplete water management system. In addition, sufficient dispersal of wintering waterfowl from a central feeding area to reduce the potential for disease outbreaks is not possible due to the lack of additional suitable habitat. The funds requested are necessary to construct water management facilities for three cropland units. This will allow production of sufficient refuge grain crops to hold the anticipated populations of birds on the refuge, thereby preventing depredations. This will also facilitate dispersal of waterfowl concentrations within the refuge and thus reduce the potential for disease outbreaks.

Dismal Swamp NWR, Virginia ($50,000). Funds are required to prepare the long-range development and management plans which will be the basis for preservation of the wildlife resources and unique wooded swamp habitat of this 50,000 acre gift to the Government.

Lewis and Clark NWR, Washington ($54,000). The funds are requested to construct a dike and water control facilities in order to provide habitat for migratory waterfowl. This same dike, with interpretive signs, will also provide the public an opportunity to participate in a wildlife interpretative program.

(b) Pollution Abatement--$540,000. Executive Order 11507 issued February 4, 1970, requires that water pollution eminating from Federal facilities be prevented, controlled and abated. In compliance with this directive, waste treatment systems have been installed at installations throughout the United States as the need for them were recognized. Abatement facilities are now required at 14 Bureau installations to correct new or emerging sources of water pollution.

(1) National Wildlife Refuges ($325,000). Funds are requested to install domestic waste disposal systems at the 13 wildlife refuges listed below for the treatment of effluents from public use and domestic sources. This is a continuation of a program begun in 1960 to provide quality public use facilities and reduce environmental pollution from substandard facilities. New and more stringent State and local sanitary codes have also resulted in additional abatement and treatment needs.

Station	Amount
Big Lake, Ark.	$ 16,000
Wapanocca, Ark.	12,000
Imperial, Calif.	32,000
Brown's Park, Colo.	54,000
Merritt Island, Fla.	44,000
Minidoka, Idaho	14,000
Crab Orchard, Ill.	8,000
Eastern Neck, Md.	62,000
Las Vegas, N.M.	10,000
Maxwell, N.M.	18,000
Cedar Island, N.C.	12,000
Reelfoot, Tenn.	25,000
Chincoteague, Va.	18,000
Subtotal	$325,000

(2) Research Laboratories ($215,000). Experimental animals are maintained at Patuxent Wildlife Research Center for various research purposes. Present waste disposal systems are inadequate to insure complete containment and sanitary disposal of effluent from bird and mammal pens. Present capability is barely adequate to meet water quality standards required by the Environmental Protection Agency and State of Maryland. Without expansion these facilities will soon be inadequate to meet the requirements of Executive Order 11507. Failure to provide additional effluent treatment capacity may curtail current research studies in the near future and would certainly preclude expansion of research dependent on experimental animals. Requested construction funds are requested to develop a treatment and disposal system for proper treatment of present and anticipated animal wastes.

2. Anadromous Fish - $2,333,000

2. Anadromous Fish: FY 1974, $1,833,000; FY 1975, $2,333,000; an increase of $500,000. This increase consists of:

Amount	Positions	Total Program	Total Positions	Explanation
$500,000	0	$2,333,000	13	Increase is for program payments to States

Need for Increase:

Anadromous fish - including Atlantic and Pacific salmon, steelhead, river herring, striped bass and others - provide our Nation with sustenance and much needed recreation. Anadromous fish require healthy, unobstructed waters for spawning and rearing of the young and an abundance of food when they leave the streams for growth to maturity in the larger bodies of water.

For well over 100 years, coastal anadromous fish have suffered losses due to pollution, habitat destruction, over-fishing, and obstacles to movement to and from the vital freshwater spawning and nursery areas. Because of these losses, there is an urgent need to preserve remaining coastal anadromous fisheries. Because of their migratory nature and commercial food value, anadromous fish are interstate and international resources. Consequently, the Federal Government has a responsibility to the sport and related commercial fisheries. Part of this responsibility is administered by the Department of Interior. Primary authority for this program is the Anadromous Fish Conservation Act.

The proposed work to be done through this grant-in-aid program between Federal and State governments includes construction and operation of fishways, hatcheries and

other facilities; conducting research into anadromous fishery problems and developing State-wide comprehensive plans for this resource. For FY 1975, 63 projects are proposed in 26 States at a Federal cost of $2,333,000. It is expected that this expenditure will increase annual sport fisherman days created by this program from 5.5 million, valued at $33 million, to 6,000,000, valued at $54,000,000.[1] In addition it is expected that the commercial fishing catch due to this program will be increased from 3,000,000 pounds, valued at $3 million, to 3,500,000 pounds valued at $3.5 million. There is no indication that the demand for sport or commercial fishing for anadromous fish is yet satisfied. Nor have anadromous fish species such as the Atlantic salmon yet been restored to satisfactory levels.

An increase of $500,000 is required to help meet the State funding requests needed to restore State anadromous fishery resources. This increase would allow the Bureau to restore the program to FY 1973 levels. The increase will permit funding of 10 new projects in eight States, and prevent reductions in required funding of 17 ongoing projects in 15 States. (See Attachment 1) The beneficial results of this increase will be an estimated addition of 260,000 man-days of sport fishing valued at $2,340,000.

If the increase is not granted, there will be a reduction in funding of 17 projects in 15 States and there will be no new starts. Three States requesting funds for FY 1975 will receive no assistance at all. We would be able to fund only 38% of the total amount requested by the States. More importantly, the anadromous fishery resource will be affected. Delays or deletion of proposed projects for construction, research, planning and stocking may ultimately reduce anadromous fish population levels, and delay restoration efforts for certain anadromous species.

Program of Work

The goal of this grant-in-aid program is to improve stocks of anadromous fish and their habitats for the benefit of sport and commercial fisheries.

To date, the anadromous fish conservation program has been accomplished through a series of cooperative State-Federal grant-in-aid projects involving 29 of the 31 eligible coastal and Great Lakes States.

Program work has been applied to the principal species of anadromous fish, through development, research, planning and coordination, and land acquisition projects. The principal species are coho and chinook salmon, steelhead trout, sea-run cutthroat trout, striped bass (rockfish), Atlantic salmon, three species of river herring (alewives, blueback herring, and hickory shad), smelt, American shad, Alabama shad, sturgeon, and sheefish.

Program accomplishments:

On both coasts, the Great Lakes, and in Gulf waters, a combination of factors has yielded benefits. Factors responsible are the opening of new areas by fish passage facilities, reduction of juvenile losses to water diverson by construction of fish screens, production and stocking of increased numbers of anadromous fish into favorable, under-utilized habitat, and restoration of spawning habitat.

The value of this program lies principally in the number of additional fisherman days of recreation created as a result of work in the four major groups of activities: development, research, planning, and land acquisition. There is value also to the commercial fishery, currently estimated at 3,500,000 pounds or about $3,500,000 in value annually.

[1] For FY 1975 an increased benefit value of $9, rather than $6, per fisherman day is used, as approved by the Water Resources Council and published in the Federal Register, September 10, 1973, Volume 38, Number 174, Part III, page 2024.

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Relationship of Payments to States (BSFW) to
Fisherman Days and Resulting Dollar Benefits

	Federal Funding to States	Fisherman Days	Dollar Benefits at $6 per Day[1]
1967	$ 1,025,000	0	$ 0
1968	2,250,000	500,000	3,000,000
1969	2,105,000	1,300,000	7,800,000
1970	2,105,000	3,000,000	18,000,000
1971	2,105,000	3,800,000	22,800,000
1972	2,105,000	4,750,000	28,500,000
1973	2,105,000	5,500,000*	33,000,000
1974	1,605,000	5,500,000*	33,000,000
	15,405,000**	24,350,000	$146,000,000

Program Results

(1) Seventeen hatchery construction projects are either completed or in progress. Production of anadromous fish from these facilities is expected to reach 1,100,000 pounds annually.

(2) Four major fish screens installed at hydroelectric dams are saving an estimated 12,000,000 (300,000 pounds) juvenile salmon and steelhead.

One of these fish screens, the Glenn-Colusa in California, is the world's largest revolving drum screen. Total cost was $2.6 million. Value of the fishery saved is estimated at $1 million annually.

(3) Fifteen streamside rearing ponds constructed or improved are increasing production of juvenile anadromous fish by 2,000,000 fish (80,000 pounds).

(4) Thirty-six new fishways were constructed and two were improved. These fishways have opened 635 miles of rivers and streams to spawning and sport fishing.

(5) Four anadromous fish research laboratories and two spawn-taking buildings were constructed under the program.

(6) Thirteen dams, weirs, or traps were constructed for low flow augmentation, assessment of anadromous fish migrations, and for spawn-taking.

(7) Research under this program had produced a vaccine to immunize juvenile salmon against a salt water disease known as vibriosis. A patent has been filed for the United States.

(8) Eight States have initiated planning and/or coordination projects. Two such projects are concerned with long-range comprehensive plans for anadromous fish.

(9) Eight States cooperating with each other are making progress in restoring anadromous fish on four interstate rivers. These rivers are the Delaware, Connecticut, Brandywine, and Merrimack.

*Estimated

**Includes only funds appropriated to the Bureau. The total does not include $994,000 transferred from the Economic Development Administration, the Upper Great Lakes Regional Commission, and the Coastal Plains Regional Development Commission to supplement projects in Michigan, Minnesota, and South Carolina.

[1] Rate established in Senate Document 97, Supplement Number 1.

ATTACHMENT 1

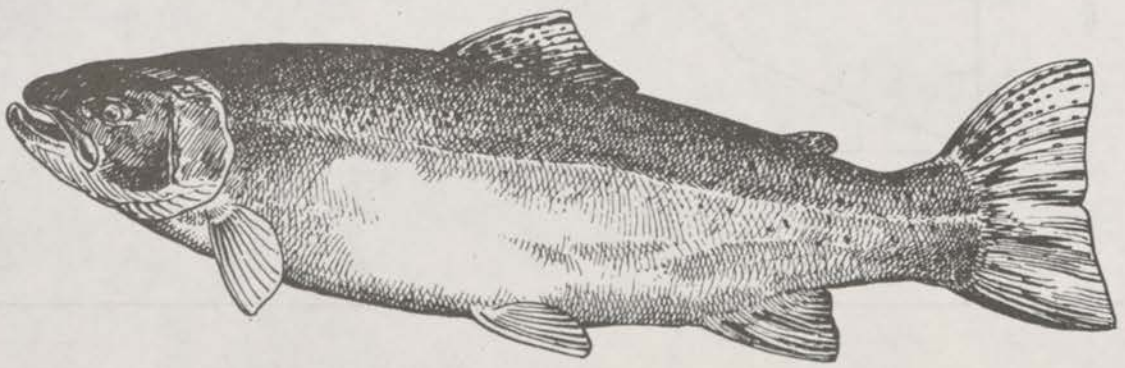
ANADROMOUS FISH CONSERVATION PROGRAM
PROPOSED ALLOCATION OF $500,000 INCREASE

A. New Projects

State	Amount
Alaska	$ 9,000
Illinois	10,000
Indiana	50,000
Maine	10,000
Michigan	100,000
New York	230,000
South Carolina	20,000
Virginia	15,000
Sub-Total	$444,000

B. Ongoing Projects

Alabama	$ 4,500
Alaska	1,850
California	5,200
Connecticut	500
Georgia	5,000
Louisiana	5,000
Maine	2,500
Massachusetts	2,600
Michigan	6,160
Minnesota	2,500
New Hampshire	4,590
Oregon	5,000
Pennsylvania	1,250
Vermont	4,350
Wisconsin	5,000
Sub-Total	$ 56,000
Grand Total	$500,000



Chinook Salmon

ANADROMOUS FISH CONSERVATION PROGRAM

BUREAU OF SPORT FISHERIES AND WILDLIFE

Figure 1

COSTS VS. BENEFITS

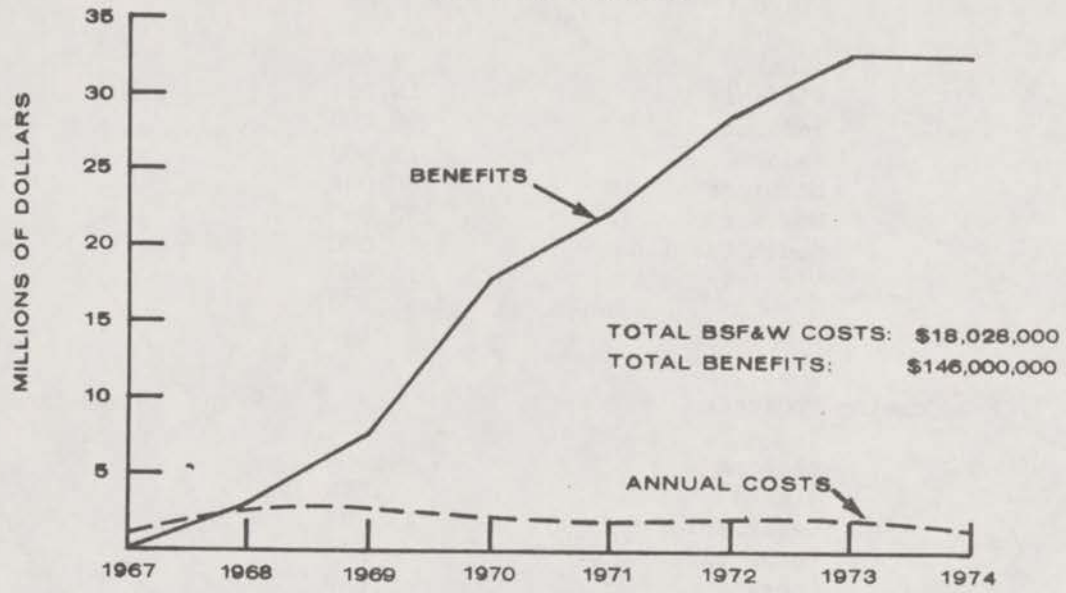
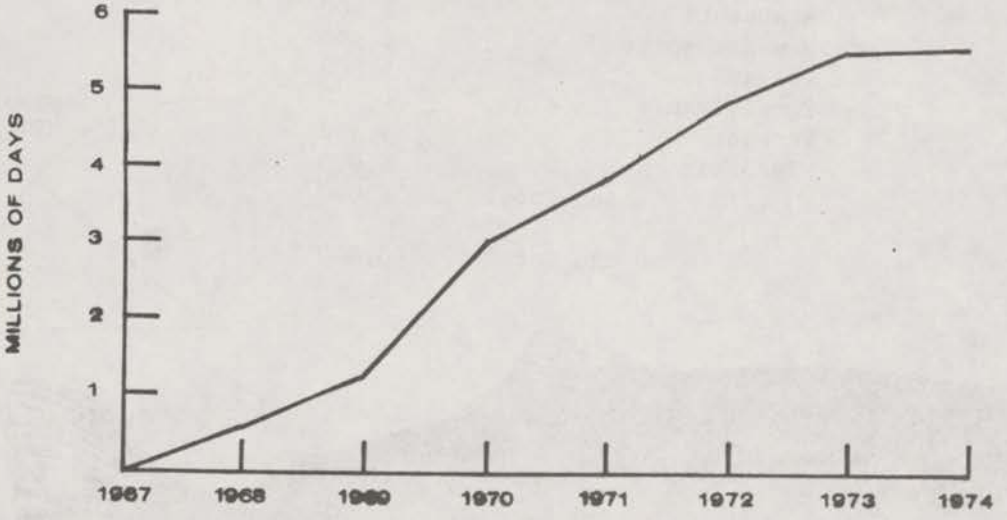


Figure 2

FISHERMAN DAYS CREATED



ANADROMOUS FISH CONSERVATION PROGRAM

BUREAU OF SPORT FISHERIES AND WILDLIFE

EXPENDITURES F. Y. 1967 THRU 1974

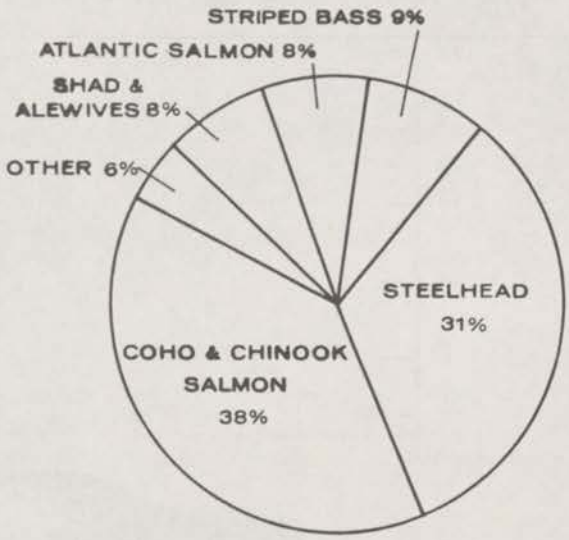
Figure 3

TOTAL: $18,028,000

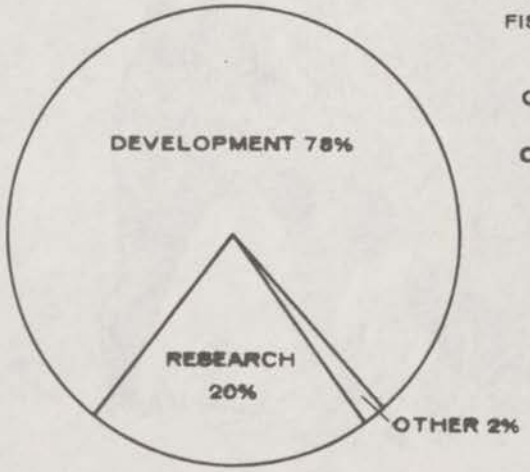
BY GEOGRAPHIC AREA



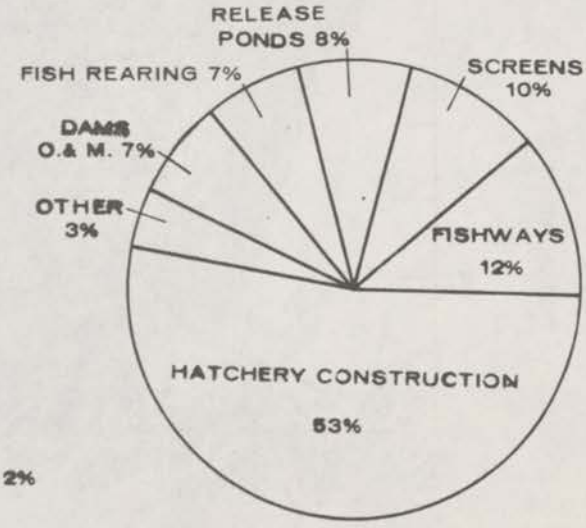
BY SPECIES



BY ACTIVITY



BY TYPE OF DEVELOPMENT



Department of the Interior — Bureau of Sport Fisheries and Wildlife
Appropriation: Construction and Anadromous Fish

	1973 actual	1974 estimate	1975 estimate
PERSONNEL SUMMARY			
Total number of permanent positions	110	110	110
Full-time equivalent of other positions	10	10	10
Average paid employment	87	87	87
Average GS grade	8.8	8.9	9.0
Average GS salary	$13,989	$14,076	$14,244
Average salary of ungraded positions	10,011	10,541	11,120



Buffalo

ITEMIZATION OF ESTIMATE

Department of the Interior
Appropriation Title: Construction and Anadromous Fish — Bureau of Sport Fisheries and Wildlife

	1973 Actual	1974 Estimate	1975 Estimate	Increase or Decrease (-)
Program and Financing				
Total obligations	$10,821,563	$8,328,669	$11,990,000	$-3,124,669
Unobligated balance brought forward	-12,083,732	-3,595,169	-3,393,000	6,988,169
Unobligated balance carried forward	3,595,169	3,393,000	....	-3,393,000
Appropriation	2,333,000	8,126,500	8,597,000	470,500
Obligations by Objects				
11 Personnel compensation	910,463	1,335,000	960,000	-375,000
12 Personnel benefits	109,482	160,000	115,000	-45,000
13 Benefits for former personnel	12,466	....	....	....
21 Travel and transportation of persons	95,548	100,000	100,000	....
22 Transportation of things	5,076	10,000	10,000	....
23 Rent, communications, and utilities	27,239	50,000	50,000	....
24 Printing and reproduction	11,880	25,000	25,000	....
25 Other services	3,250,208	5,305,669	7,555,000	2,249,331
26 Supplies and materials	73,314	100,000	100,000	....
31 Equipment	67,502	75,000	75,000	....
32 Lands and structures	2,935,587	3,000,000	3,000,000	....
Total program costs, funded	7,499,451	10,160,669	11,990,000	1,829,331
94 Change in selected resources	3,322,798	-1,832,000	....	+1,832,000
Total obligations	10,821,563	8,328,669	11,990,000	3,661,331

MIGRATORY BIRD CONSERVATION ACCOUNT

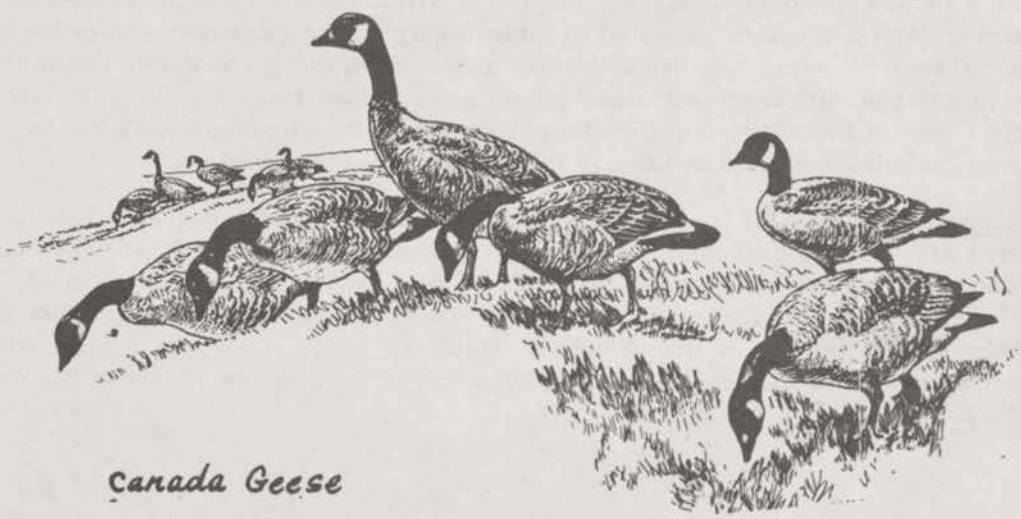
Highlight Statement

The Migratory Bird Conservation Account funds the acquisition of habitat to maintain the national migratory waterfowl resource. Basic funding is from the sale of migratory bird hunting stamps commonly known as duck stamps.

To acquire lands rapidly before the habitat is destroyed, Congress passed the Wetlands Loan Act in 1961 authorizing the advance appropriation of up to $105 million to accelerate land acquisition. The loan is to be repaid with 75 percent of annual duck stamp receipts commencing in fiscal year 1977.

The objective of the accelerated program is to acquire 2,500,000 acres. In the first 12 years of the program, advance appropriations and duck stamp receipts totaled $151 million, permitting acquisition of 1,657,000 acres. During this period, 45 new national wildlife refuges were established and 1,274,000 acres acquired to preserve small wetlands for waterfowl production. About 96,000 acres will be added in fiscal year 1974, and it is proposed to acquire an additional 92,000 acres in fiscal year 1975.

An advance appropriation is not being requested in fiscal year 1975. Duck stamp receipts should permit acquisition of the most critical tracts. An effort will be made to obtain long-term options that can be accepted in future years so that the program can continue toward its objective in an orderly manner with a minimum habitat loss.



Canada Geese

Acquisition of refuges and other areas: Fiscal year 1974, $3,500,000; fiscal year 1975, -0-, decrease, $3,500,000.

	Amount Available 1973	Amount Available 1974	Estimate 1975	Increase or Decrease(-)
Advance (current definite)	$ 7,100,000	$ 3,500,000	$ ---	$-3,500,000
Duck stamp receipts (permanent indefinite)	10,734,313	11,000,000	12,000,000	1,000,000
TOTAL	$17,834,313	$14,500,000	$12,000,000	$-2,500,000

Program of work: The Migratory Bird Conservation Account funds the acquisition of habitat to maintain the National migratory bird resource pursuant to the Migratory Bird Conservation Act (16 U.S.C. 715-715s), and the Migratory Bird Hunting Stamp Act (16 U.S.C. 718d). Receipts from the sale of migratory bird hunting stamps, commonly known as duck stamps, and advance appropriations authorized by the Wetlands Loan Act (16 U.S.C. 715k-3-5), are merged in the Migratory Bird Conservation Account. These funds are available exclusively for the location, ascertainment, and acquisition of suitable areas for migratory bird refuges and waterfowl production areas, and expenses of the Postal Service in printing and selling the duck stamps.

The Wetlands Loan Act was passed in 1961 to accelerate the acquisition of waterfowl habitat. An objective of 2,500,000 acres was established for this accelerated program, which has been extended from the initial 7-year program to the present 15-year program. The advance appropriations have totaled $84.9 million against the $105 million authorization. After the loan authorization terminated on June 30, 1976, repayment of the loan begins with 75 percent of annual duck stamp receipts.

No advance appropriations is being requested for fiscal year 1975. The obligation program of $14.8 million will be used to acquire the most critical tracts for refuges and waterfowl production areas. The funds will also be used to purchase long-term options that can be accepted in future years and to lease tracts in order to hold them from being converted to other uses. Even though wetlands continue to be threatened with destruction and prices are escalating at a rapid rate, there is this means of flexibility that permits postponement of obligations for a limited time. Thus, existing staff can be used to stockpile future commitments.

Accomplishments: In the twelve years of the accelerated program, 1,657,000 acres have been acquired or protected by easement, as shown below. The accomplishments include the establishment of 45 new refuges and completion of 36 refuges. If the estimated acreage through Fiscal Year 1975 is acquired, this will represent 74 percent of the objective. However, even if all of the $105 million loan is appropriated, acquisition will fall short of the program objective by about 500,000 acres.

Appropriation, 1973	$7,100,000
Appropriation, 1974	3,500,000

Summary of Increases and Decreases, 1975

Acquisition of refuges and other areas	Base for 1975	Increase 1975	
To provide for continuation of the wetlands acquisition program (net decrease)	$3,500,000	$-3,500,000	-3,500,000
Budget estimate, 1975			...

Analysis by Activities (Direct Appropriation)

Activity	FY 1974 Amount Available	FY 1975 Total Appropriation	Pay Cost Supplemental	Transfers	Amount Available
Acquisition of refuges and other areas	$3,500,000	...	...	...	...

Analysis by Activities (Direct Appropriation)

Activity	FY 1973 Amount Available	FY 1974 Amount Available	FY 1975 Estimate	Increase(+) or Decrease(-) 1974 Compared with 1973	Page Reference
Acquisition of refuges and other areas	$7,100,000	$3,500,000	...	$-3,500,000	FSF-

ESTIMATES OF ACCOMPLISHMENTS AND OBJECTIVES, 1962-1976
(ACRES)

Year	Refuges	Waterfowl Production Areas			Total
		Fee	Easements	Total	
1962-1973	383,207	334,313	939,528	1,273,841	1,657,048
1974 (estimate)	22,000	24,000	50,000	74,000	96,000
1975 (estimate)	17,000	27,000	48,000	75,000	92,000
Total 1962-1975	422,207	385,313	1,037,528	1,422,841	1,845,048

Appropriation Title: Migratory Bird Conservation Account

	1973 actual	1974 estimate	1975 estimate
PERSONNEL SUMMARY			
Total number of permanent positions	206	206	206
Full-time equivalent of other positions	10	11	11
Average paid employment	158	163	175
Average GS grade	8.8	8.9	9.0
Average GS salary	$13,989	$14,076	$14,244
Average salary of ungraded positions	$10,011	$10,541	$11,120





ITEMIZATION OF ESTIMATE

Department of the Interior
Appropriation Title: Migratory Bird Conservation Account — Bureau of Sport Fisheries and Wildlife

	1973 Actual	1974 Estimate	1975 Estimate	Increase or Decrease (-)
Program and Financing				
Total obligations	$11,843,710	$19,000,000	$14,771,000	$-4,229,000
Unobligated balance brought forward	-980,043	-6,970,646	-2,470,646	+4,500,000
Unobligated balance carried forward	6,970,646	2,470,646	....	-2,470,646
Recovery of prior year obligations	....	....	-300,354	-300,354
Appropriation:				
Current definite	7,100,000	3,500,000	....	-3,500,000
Permanent indefinite	10,734,313	11,000,000	12,000,000	1,000,000
Obligations by Objects				
11 Personnel compensation	2,372,599	2,600,000	2,700,000	100,000
12 Personnel benefits	143,935	200,000	220,000	20,000
13 Benefits for former personnel	2,668	....	....	....
21 Travel and transportation of persons	276,336	350,000	350,000	....
22 Transportation of things	15,514	30,000	30,000	....
23 Rent, communications, and utilities	95,608	120,000	150,000	30,000
24 Printing and reproduction	378,428	500,000	500,000	....
25 Other services	288,627	400,000	400,000	....
26 Supplies and materials	56,558	60,000	61,000	1,000
31 Equipment	58,485	60,000	60,000	....
32 Lands and structures	8,183,800	14,380,000	10,000,000	-4,380,000
41 Grants, subsidies and contributions	264,602	300,000	300,000	....
42 Insurance claims and indemnities	1,000	....	....	....
Total costs, funded	12,138,160	19,000,000	14,771,000	-4,229,000
94 Change in selected resources	-294,450	....	....	....
Total obligations	11,843,710	19,000,000	14,771,000	-4,229,000

ADMINISTRATIVE PROVISIONS

Explanation of Language Changes

Passenger Motor Vehicles

The Bureau of Sport Fisheries and Wildlife 1975 estimates include a request for the purchase of 166 passenger motor vehicles, 116 of which are for replacement as follows:

	Replacements	Additions	Total Requested
Motor vehicles:			
Police-type automobiles	60	24	84
Standard-type automobiles	34	11	45
Total automobiles	94	35	129
Station wagons	22	15	37
Total	116	50	166

All of the vehicles to be replaced will meet the age and mileage replacement standards, or both. Many will have run over 100,000 miles in hard service. In estimating these requirements, careful consideration has been given to the effective use of the service of Interagency Motor Pools where their location and equipment permit.

Of the 94 replacement vehicles, 60 police-type automobiles are needed for replacement in the management and enforcement acitvity for use principally by U.S. game management agents to carry out effectively the responsibilities of enforcing fish and game laws enacted by the Congress. These special type vehicles are needed for rapid acceleration and safe handling at the sustained high speeds necessary to pursue violators of fish and game laws. In addition, these vehicles provide the heavy duty needed to travel in snow or ice, to pull out of mud, sand, and deep ruts and haul cargo and boat trailers. The average mileage for these vehicles is 30,000 miles per year, much of which is on unimproved roads and rough hazardous terrain.

Public Law 91-423 provides that the Administrator of General Services shall make determinations concerning equipment and systems which are customarily incorporated into a passenger motor vehicle completely equipped for ordinary operation. Also, the law provides that the price of such additional equipment and systems shall not be considered in determining whether the cost of the vehicle is within any maximum price otherwise established by law. This will permit the purchase of police-type vehicles in the number specified herein equipped with police-type and safety features that are important for effective enforcement work, as may be prescribed by regulations issued by the Administrator of General Services.

The 34 replacements of standard-type vehicles and 22 station wagons are for various Bureau programs and will provide safe and economical transportation in areas not serviced by motor pools.

The 11 additions to the fleet of standard motor vehicles are listed below:

One additional vehicle will be located at Iowa Cooperative Wildlife Research Unit at Ames, Iowa. This vehicle is required for conducting extensive field research activities.

Five additional vehicles are required for transportation in making surveys and inspections of water development projects related to environmental impact assessments.

One vehicle will be needed for the transportation of personnel doing management work at the San Luis National Wildlife Refuge in California. Two will be needed for new refuges, i.e., Kiamichi NWR, Hugo, Oklahoma and Sevilleta NWR, Soccoro, New Mexico.

Three vehicles are needed for appraisers and land surveying technicians employed in the wetland acquisition program at Aberdeen and Huron, South Dakota.

The addition of 24 police-type vehicles is made necessary by the expanded responsibilities in the enforcement of regulations concerning importation and interstate transportation of fish and wildlife--particularly endangered species.

Of the 37 station wagons requested, 15 are additions to the fleet. Twelve are to equip personnel engaged in field activities in coastal and estuary areas where other agencies plan major construction, particularly dams, power plants, reservoirs, dredging, navigation and channelization projects. These vehicles will be headquartered at Charleston, S. C. (2), Lafayette, La.,Morehead , N.C. (2) Panama City, Fla. (2), Green Bay, Wisc. (2), Decatur, Ala., and Vero Beach, Fla. (2).

Three vehicles are needed for field research acitivities and will be located at Arcata, Calif., Provo, Utah, and Orono, Maine.

General Services Administration standards provide for replacement of passenger motor vehicles every six years or 60,000 miles. On an age basis, this permits an economical replacement of the entire fleet in six years. On a mileage basis, because of Bureau usage, economical replacement is every two to four years.

This request for purchase of 166 motor vehicles will permit maintenance of the Bureau fleet on an economical as well as safe basis, in accordance with replacement standards established by General Services Administration.

Aircraft

Fiscal year 1975 estimates include purchase authority for 3 replacement aircraft, all of which require special equipment. The replacements are needed since the continued use of the present aircraft is not economical due to the excessively high cost of maintenance and repair--a result of age and flight time on each. Safety, as well as economy of operation and maintenance, decline sharply with aircraft age. The replacements will be headquartered at Izembek and Anchorage, Alaska; and Portland, Oregon.

Aircraft are used for waterfowl surveys; game law enforcement patrols; flying migratory and non-migratory bird surveys; refuge management including plant control, seeding of waterfowl feeds, and crop depredation control work.

Sport fish and wildlife activities and operations are performed largely in areas where transportation facilities and roads are inadequate, making it necessary to rely on aircraft and boats.

All aircraft are piloted by U.S. game management agents, biologists, refuge managers, and in a few instances by pilot-mechanics. In the interest of health and safety, reliable equipment is necessary due to the nature of the work.

Aircraft are not used to transport personnel as a primary function.

Emergency Expenses for Enforcement Activities

In combating both illegal activities and trafficking in wildlife, it is sometimes necessary for our Special Agents to conduct undercover operations in order to obtain evidence necessary to apprehend and convict violators. In conducting these investigations, it is often necessary to immediately acquire (through purchasing or rental, whichever the situation dictates) material and/or services to insure the success of these operations. Due to the sensitivity of these types of investigations, the confidentiality of these purchases is paramount, not only to insure the success of the operations, but to assure the safety of the Special Agents and the integrity of their undertaking. These miscellaneous and emergency expenses will be authorized or approved by the Secretary and to be accounted for solely on his certificate, not to exceed $40,000 per annum.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

STATEMENT OF RECEIPTS

General Fund Receipts Deposited to the Credit of the United States Treasury during the Fiscal Year 1973 and Estimated for the Fiscal Years 1974 and 1975

	Actual 1973	Estimated 1974	Estimated 1975
Permits and licenses	$12,387	$14,500	$15,000
Fines, penalties, and forfeitures	5,069	6,400	6,900
Gifts and contributions	321	500	550
Rents, royalties, and other earnings	367,361	390,050	401,150
Sale of Government property and products	100,595	108,050	111,100
Business concessions	1,885,335	2,017,700	2,100,000
Fees for services	32,904	36,800	38,500
Recoveries and refunds	21,720	26,000	26,800
Totals	2,425,692	2,600,000	2,700,000

Recreation Fee Revenues Deposited to the Credit of the Land and Water Conservation Fund during the Fiscal Year 1973 and Estimated for the Fiscal Years 1974 and 1975

	Actual 1973	Estimated 1974	Estimated 1975
Admission Fees (Annual Permits)	$ 2,149,583	2,700,000	2,300,000
Other (Short-term Entrance, Admissions, Guide, Elevator, and User Fees)	11,631,392	12,300,000	9,600,000
Total	13,780,975	15,000,000	11,900,000

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NATIONAL PARK SERVICE

SUMMARY OF APPROPRIATIONS, REVENUES, AND VISITS

Fiscal Year	Appropriations a/ Operating Programs	Grants and Assistance Programs	Planning and Development Programs	Total	Revenues General Fund	Land and Water Conservation Fund	Visits
1964	$48,553,529	$1,056,400	$63,466,900	$113,076,829	$7,085,877	--	107,446,700
1965	53,087,000	1,238,000	73,860,600	128,185,600	5,581,436	$1,768,524	113,703,200
1966	58,179,200	1,119,500	68,469,500	127,768,200	1,707,748	6,371,967	127,440,300
1967	64,320,600	1,257,600	57,488,400	123,066,600	1,747,071	6,544,330	135,325,600
1968	73,201,200	1,745,500	53,238,100	128,184,800	1,858,361	6,996,063	145,342,200
1969	76,905,700	1,501,500	26,328,600	104,735,800	1,929,915	7,135,505	157,356,500
1970	93,417,770	2,607,900	33,232,986	129,258,656	2,187,246	6,581,443	166,900,000
1971	114,363,900	8,321,600	41,643,300	164,328,800	2,182,501	12,093,209	186,188,000
1972	127,655,400	10,043,600	103,742,800	241,441,800	2,114,753	12,989,286	206,441,900
1973	162,666,000	17,759,000	55,362,000	235,787,000	2,425,692	13,780,975	215,540,400
1974 (Est.)	201,876,000	22,642,000	72,590,000	297,108,000	2,600,000	15,000,000	224,100,000
1975 (Est.)	219,963,500	31,241,000	77,851,500	329,056,000	2,700,000	11,900,000	235,800,000

a/ Adjusted to include supplemental appropriations and to reflect appropriation transfers.

NATIONAL PARK SERVICE

Comparative Summary of the Amount Available for 1974 with the 1975 Budget

Appropriation and Activity	Estimated Available 1974	Budget 1975	Increase or Decrease (-)
Operation of the National Park System:			
Park management	$187,493,000	1/ $203,976,000	$16,483,000
Forest fire suppression and rehabilitation of burned areas	700,000	700,000	--
Executive direction	5,283,000	5,382,000	99,000
Subtotal	193,476,000	210,058,000	16,582,000
Planning and Construction:			
Buildings, utilities and other facilities	11,212,000	47,857,000	36,645,000
Park, recreation, and wilderness planning	4,400,000	5,000,000	600,000
Cooperative programs	3,927,500	3,927,500	--
Statutory or contractual aid for other activities	472,500	518,500	46,000
Subtotal	20,012,000	57,303,000	37,291,000
Road Construction (Liquidation of Contract Authority):			
Roads, trails, and parkways	35,000,000	23,000,000	-12,000,000
Preservation of Historic Properties:			
Historic preservation and special studies	15,842,000	2/ 24,375,000	8,533,000
John F. Kennedy Center for the Performing Arts	2,400,000	2,420,000	20,000
Planning, Development and Operation of Recreation Facilities	30,378,000	11,900,000	-18,478,000
Grand Total	297,108,000	329,056,000	31,948,000

1/ Includes supplemental of $10,743,000 requested to cover pay raises.

2/ Includes supplemental of $283,000 requested to cover pay raises.

NATIONAL PARK SERVICE

Operation of the National Park System

Appropriation 1973	$158,878,000	
Supplemental appropriation, 1973	4,040,000	
Total appropriation, 1973		$162,918,000
Transferred to "Operating Expenses, Public Buildings Service," General Services Administration		-252,000
Total available, 1973		162,666,000
Appropriation, 1974	183,052,000	
Pay cost supplemental (January and October pay raises)	8,684,000	
Pay cost supplemental, Wage Board pay raises	2,059,000	
Total appropriation, 1974		193,795,000
Transferred to "Operating Expenses, Public Buildings Service," General Services Administration		-319,000
Total available, 1974		193,476,000

Summary of Increases and Decreases, 1975

	Base for 1975	Increase 1975	
Park Management:			
Reimbursement for Space, Services and Facilities Provided by General Services Administration in Accordance with Public Buildings Amendments of 1972, P.L. 92-313		$+5,112,000	
Ruins Stabilization Program		+800,000	
Operation of Park Areas at Standard		+4,562,300	
Interpretation of Bicentennial Parks		+3,000,000	
Annualization of Wage Board Pay Raises		+1,633,000	
Annualization of Classified Pay Raises		+1,294,000	
Employees' Compensation Fund payments	$577,600	+81,700	+16,483,000
Executive Direction:			
Annualization of Classified Pay Raises		$99,000	$+99,000
Net increase, 1975			16,582,000
Budget Estimate, 1975			210,058,000

OPERATION OF THE NATIONAL PARK SYSTEM

Analysis by Activity

Activity	Fiscal Year 1973 Amount Available	Fiscal Year 1974 Total Appropriation	Fiscal Year 1974 Pay Cost Supplemental	Fiscal Year 1974 Transfers	Fiscal Year 1974 Amount Available
1. Park management	$157,846,452	$177,612,000	$10,200,000	-319,000	$187,493,000
2. Forest fire suppression and rehabilitation of burned areas	700,000	700,000	--	--	700,000
3. Executive direction ...	4,119,923	4,740,000	543,000	--	5,283,000
Unobligated balance restored	33,567	--			--
Total	162,699,942	183,052,000	10,743,000	-319,000	193,476,000

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 compared with 1974
1. Park management	$157,846,452	$187,493,000	$203,976,000	$+16,483,000
2. Forest fire suppression and rehabilitation of burned areas	700,000	700,000	700,000	--
3. Executive direction ...	4,119,923	5,283,000	5,382,000	+99,000
Unobligated balance restored	33,567	--	--	--
Total	162,699,942	193,476,000	210,058,000	+16,582,000

1. Park Management

The Service administers 298 park areas comprising about 29.3 million acres of federally owned land located in 47 States, the District of Columbia, Puerto Rico, and the Virgin Islands. The increase proposed is for (a) built-in requirements, (b) to establish a comprehensive ruins stabilization program, (c) the interpretive program for the Bicentennial celebration, and (d) for operations in park areas.

1. Park management: Fiscal year 1974, $187,493,000; fiscal year 1975, $203,976,000; increase, $16,483,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+1,633,000	--	--	--	Built-in increase: Annualization of wage rate increase.
(2) +1,294,000	--	--	--	Built-in increase: Annualization of classified pay increase.
(3) +5,112,000	--		--	Built-in increase: Reimbursement for space, services and facilities provided by GSA in accordance with P.L. 92-313, Public Buildings Amendment of 1972.
(4) +81,700	--	$659,300	--	Built-in increase: Employees' Compensation Fund Payments.
(5) +800,000	+10	800,000	10	To establish a comprehensive ruins stabilization program.
(6) +3,000,000	--	3,409,000	--	To accelerate an interpretive program for the Bicentennial celebration.
(7) +4,562,300	+276			To provide for operations in park areas.
+16,483,000	+286			

Cost Factors Involved in Increases

(5) Ten permanent positions at an average annual rate of $12,000, $120,000; 52 man-years of seasonal employment, $390,000; supplies, materials, and equipment, $118,000; travel and transportation of things, $20,000; rent, utilities and communications, $16,000; and other services, including contract work, $136,000.

(6) Printing and reproduction, $180,000; supplies, materials and equipment, $116,000; and other services, including contract work, $2,704,000.

(7) Two hundred and seventy-six permanent positions at an average annual rate of $10,000, $2,760,000; 156 man-years of other than permanent employment, $1,170,000; supplies, materials and other equipment, $102,300; and contractual and other services, $530,000.

Built-in Requirements

Need for increase: A total of $8,120,700 is needed to meet built-in requirements as detailed below:

Wage Rate Increase

An increase of $1,633,000 is requested to cover the costs in Fiscal 1975 of wage increases made pursuant to surveys conducted in Fiscal 1974. A supplemental appropriation request is proposed for the part-year cost in Fiscal 1974. The Fiscal 1975 portion is the amount needed to annualize the 1974 wage increases.

The Service's wage rate schedules are based on those of other agencies (such as Department of Defense, U.S. Forest Service, Veterans Administration, etc.) and on field surveys of wage rates for comparable employment in the private sector.

This estimate of wage rate increases also includes funds to cover: (1) Additional costs resulting from the conversion of nonsupervisory and leader employees from the three-step to the five-step rate system of the Federal Wage System. In accordance with Public Law 92-392, and conversion rules prescribed by the Civil Service Commission, the five-step rate system was effective on the first payperiod on or after April 30, 1973. (2) Wage board pay increases necessary for the implementation of Public Law 90-560 (The Monroney Amendment), approved October 15, 1968, which provides for additional increases for surveys conducted since October 1968.

Classified Pay Raise

An increase of $1,294,000 is requested to cover the additional costs in Fiscal 1975 of the classified pay raise authorized by Executive Order 11739, effective the first payperiod on or after October 1, 1973. The part year costs in Fiscal 1974 are requested in a supplemental appropriation request for that year. This amount of $1,294,000 will annualize the cost in Fiscal 1975.

GSA Space Rental

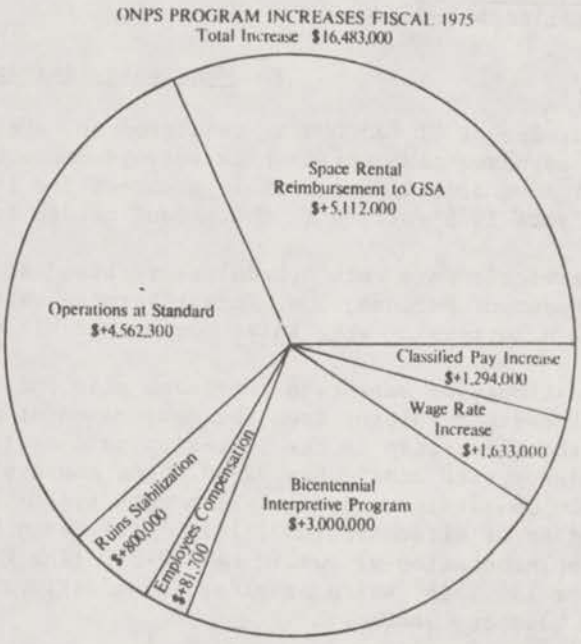
An amount of $5,112,000 is requested to meet the requirements for direct payment to the General Services Administration for the cost of Government-owned, Government-leased office space and related services beginning in Fiscal 1975.

This requested increase is brought about by Public Law 92-313, signed June 16, 1972, which changes the method of financing office space by requiring all Federal agencies to pay for space and related services to the General Services Administration. The rates charged approximate commercial equivalent rates. Accordingly, $5,112,000 reflects the estimated space rental and related services requirements of the National Park Service for Fiscal 1975 as determined by GSA.

Employees' Compensation Fund Payments

Beginning with 1963, amounts have been included in the Service's budget to repay the total cost of benefits and other payments made from the Employees' Compensation Fund on account of injury or death of National Park Service employees occurring after December 1, 1960. The amount of $659,300 is the total amount required for payment and is based on a Department of Labor report to the Department of the Interior. This report details the payments made during the past Fiscal Year, as required by Public Law 86-767, approved September 13, 1960.

The amount of $81,700 is an increase over the Fiscal 1974 requirement of $577,600. This increase is attributed to higher salary levels which form the basis of compensation, cost of living increases, the increased cost for medical care, and the overall increase in new claims for compensation.



Program Increases

Need for increase: A total increase of $8,362,300 represents an increase in park operating needs in Fiscal 1975 as follows:

Ruins Stabilization

The amount of $800,000 is required to establish a comprehensive ruins stablization program in Fiscal 1975 to prevent further deterioration of the irreplaceable prehistoric and historic resources in the System.

Included within the 298 areas of the National Park System are 22 historical areas which have been established by Congress primarily to preserve prehistoric ruins resources. There are other areas of the System, though not established primarily for ruins preservation, but nonetheless include within their boundaries prehistoric ruins and historic structures which must be preserved for future generations.

Previous efforts of ruins stabilization and maintenance of historic structures have been dependent upon the level of funding in each park that could be directed toward this need. More immediate requirements of visitor services, other maintenance needs, etc., have limited funding for adequate protection of these types of resources to an unsatisfactory level.

In recent years only the most emergency type projects have been accomplished, those created by unusual natural forces such as heavy precipitation, earthquakes or erosion from increased visitation. However, cyclical maintenance work needed for prehistoric features has continually been postponed due to lack of funding. Several features are in such poor condition today, that they actually are in danger of collapsing and must be closed to visitors for safety reasons. A comprehensive program, therefore, is the only way to assure adequate attention to these irreplaceable resources.

The proposed program of work calls for (1) an increase in the staff of the Ruins Stabilization Unit at the Arizona Archeological Center to include individuals with competence in engineering, architecture and historic architecture; (2) implementation of an agreement with the University of Pennsylvania to establish a multi-disciplinary center with the capability of handling programs in preservation of historic structures; (3) an acceleration of studies of new techniques and materials for the preservation and maintenance of prehistoric and historic features; and (4) adequate funding of these programs to take care of emergency needs and complete the initial stabilization projects and provide for a continuing maintenance program.

As part of the Ruins Stabilization program, teams will employ the use of a Modularized Mobile Rock-Melting Subterrene Drill which was developed by the Los Alamos Scientific Laboratory under the sponsorship of the National Science Foundation and tailored to the specifications of the National Park Service for drilling drainage holes in prehistoric ruins. This is a vitally important new tool for draining ruins with a minimum of disturbances to unexcavated cultural remains.

The program provides seasonal employment for over 50 Navajo Indians including graduate and undergraduate students majoring in archeology and anthropology and enrollees in the Navajo Youth Corps.

The requested $800,000 will be used as follows:

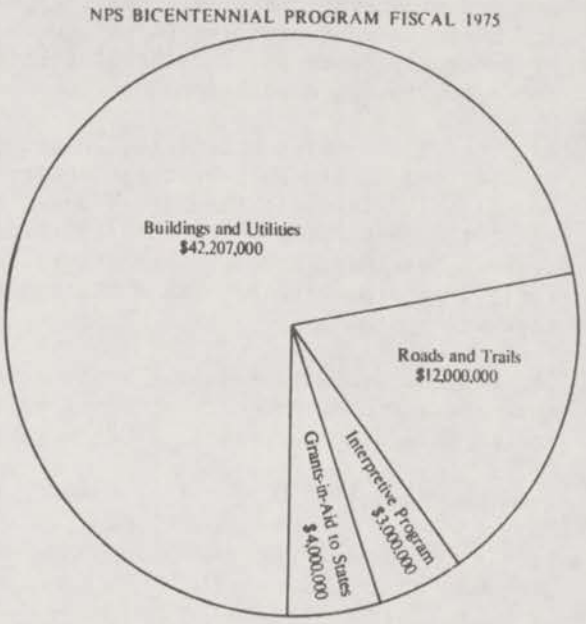
		Staffing	
	Amount	Permanent	M. Y. Other
Staff costs at Arizona Archeological Center and the University of Pennsylvania	$65,000	4	0
Studies of New Techniques and Materials for Preservation	75,000	0	0
Stabilization of Prehistoric Sites in Western and Southwest Regions	335,000	5	22.5
Preservation and Rehabilitation of Historic Sites in Southwest and Midwest Regions	325,000	1	29.5
TOTAL	$800,000	10	52.0

Interpretation of Park Areas for the American Revolution Bicentennial Celebration

An increase of $3,000,000 is required for Fiscal 1975 to carry out an interpretive program of park areas in connection with the celebration of the American Revolution Bicentennial. These funds are necessary to accelerate preparation of interpretative materials in time for the focal year of the celebration, 1976.

The National Park Service administers 22 areas having historical significance relating to the American Revolution. Additionally, numerous monuments and memorials have been designated within the National Capital Area to commemorate the events and the people of that era who contributed to the founding of the Nation.

Preparation of these areas must also include a well-planned interpretive program of the Bicentennial in addition to a balanced program of development of needed facilities. The development of these areas by restoration and reconstruction of historical buildings and the construction of visitor use facilities are part of an ongoing program begun in 1973 and funding requests to continue in Fiscal 1975 as described elsewhere in this justification. The need now exists to undertake a large scale program to provide appropriate interpretive information describing these resources as they relate to the American Revolution and contribute to the growth and development of our Nation's heritage.



Initial planning of the proposed interpretative programs was begun in Fiscal 1974. The amount requested here will permit continuation of the preparation of Bicentennial interpretive activities for all National Park Service areas so that the heritage of America can be communicated to the entire Nation. Most of these interpretive programs will be produced under contract with appropriate institutions, and include manuscripts for informational documents (mini-folders, park folders, maps); writing and collection of appropriate historical documents; and preparation of interpretive film scripts.

Examples of Recent Accomplishments: Planning to make Bicentennial interpretation available to park visitors not only in the designated Bicentennial areas, but all areas administered by the National Park Service across the Nation has gone forth. Plans are underway on a variety of techniques to communicate this important observance and to provide flexibility in presenting the Bicentennial in an appropriate manner for the variety of available facilities.

To accomplish this interpretive objective, planning and preparation was begun for two films, for use throughout NPS areas and to be made available to schools and civic groups, entitled "Americans and the Revolution" and "Wilderness America, 1776." Manuscripts are being prepared for three professional publications--Signers of the Declaration, Signers of the Constitution, and The Presidents. Informative historic pamphlets are being prepared for 12 Bicentennial sites.

A handbook entitled, National Park Guide to Historic Places of the American Revolution has been produced to show, State by State, those monuments and parks relating to the Revolution.

Three traveling living history programs are being prepared for use in the parks. The themes of the programs are military life, colonial music, and colonial arts and crafts.

Operating Park Areas

An increase of $4,562,300 is requested for park operations activities. This increase will provide for the highest priority operating needs and will bring general operations closer to the goal of prescribed standards. In the last 10 years, 79 new areas were added to the National Park System for an increase of 36 percent in number of areas administered. For the same time period visitation has increased 101 percent from 107,446,700 to 215,540,400 as of Fiscal 1973. Therefore, the need for operational funds has grown significantly and it is imperative that these most essential operating needs be taken care of in Fiscal 1975.

Other factors contributing to the mounting operational needs are the continual increase in the cost of doing business and meeting increased visitor demands. These demands are brought about by the changing character of today's visitor. Equipped with greater discretionary income and more leisure time, the park visitor is more likely to be an urban dweller traveling further and/or more often in search of a quality park experience. But he is less likely to be familiar with the fragile nature of the resources or the safety hazards inherent in a park setting.

The Service has not been able to meet established standards that detail optimum operating levels. The requested increase is to provide for the following program needs:

(1) interpretation and visitor services;

(2) maintenance and rehabilitation;

(3) security and protection;

(4) safety;

(5) resources management; and

(6) informational publications.

The interrelationship of these program functions and the funding of operations for any program area is most important. For example, inadequacies in a maintenance program delay necessary work and cause the facility to fall into further disrepair requiring more costly repair. It also increases the likelihood of vandalism and poses a safety hazard to both visitors and park personnel. Further, if the facility is a historic structure, delaying maintenance imposes the danger of losing an irreplaceable resource.

In another program area such as the interpretive program, less than adequate resources inhibits Service efforts in providing a quality park experience. Further it decreases the opportunity to orientate the visitor to the unique and fragile nature of the resources of the area, potential safety hazards and significant points of interest.

The National Park System has a mandate to preserve and protect the unique natural, historical and cultural resources within the System, carry out the Administration's "Parks for the People" program, and provide a quality park expereince for the American public. The $4,562,300 increase requested is essential to these purposes.

Detailed explanations of the programs of work for the elements of the park management activity are discussed below:

Program of Work:

Management of Park Areas

Management of park areas includes a wide array of functions necessary to carry out day-to-day activities in the individual park units. Under this activity personnel must provide all necessary services for visitor use while assuring the unique physical and natural characteristics of the units remain unimpaired.

Considering visitation to the park units will exceed 224.1 million in Fiscal 1974 (revised projection based on half-year actual and half-year estimated) and the demands placed on the Service from this visitation, the magnitude of this management activity can be visualized. Park management programs are carried out in such manner as to assure the visitor's park experience is meaningful while the consequences of the visitor load on park resources are minimal. Towards this end, the following programs represent areas vital to the satisfactory operations of the National Park System.

Concessions Management

The Concessions Management Program provides direction to the activities of private enterprise to provide and develop new facilities and services and/or take over existing concessions that are necessary and appropriate for the use and enjoyment of visitors to areas administered by the National Park Service. To protect the visitors, the National Park Service, through contracts with the concessioners and in accordance with the provisions of Public Law 89-249, (1) regulates its rates, advertising matter and articles of merchandise; (2) requires adherence to operational standards covering public health, sanitation and visitor comfort; and (3) oversees the total concessioner operations throughout the National Park System.

Continued efforts are being made to increase the sale of native and American Indian handicraft associated with interpretive features of areas by encouraging concessioners to enlarge the scope and supply of these handicrafts.

Examples of Recent Accomplishments: As of the end of Fiscal 1973, there were 319 concessioners operating in 82 areas administered by the National Park Service, including National Capital Parks. Of this total, 132 were operating pursuant to concession contracts and 187 were operating pursuant to concession permits.

A Servicewide concessions management seminar was held in April 1973 at the Albright Training Center in Grand Canyon National Park. Nominees attending this seminar were National Park Service field personnel with concession responsibilities within their area of operations and concessioners.

In calendar 1972, new permits were negotiated with 57 new concessioners. New contracts or permits were renegotiated with 38 present concessioners; other contract or permit activity including extensions, assignments, terminations and fee renegotiations were carried out involving 27 concessioners. Capital improvements made by concessioners in visitor facilities, furnishings and equipment totaled over $10,400,000 in calendar 1972.

In September 1973, the National Park Service and the Office of Minority Business Enterprise of the Department of Commerce executed an agreement designed to promote minority business enterprise in the concessions program of the National Park Service.

Business concession fees collected in Fiscal 1973 amounted to $1,885,335.

Interpretation and Visitor Services

Ever-increasing numbers of people visit areas of the National Park System for various purposes including recreation, inspiration, and education. Properly planned and conducted interpretation of park purposes and features is an important contribution to good park maintenance and protection.

The National Park Service has an obligation, not only to make the parks available to the public, but also to interpret them in a manner that will help people appreciate and understand their place in the total environment. Because of their outstanding characteristics, the parks offer ideal opportunities for school groups, organizations, families, and individuals to observe, study, and enjoy varieties of natural, historical, cultural, and recreational environments.

The most effective method of extending the National Park Service environmental message is through personally conducted, high quality interpretive programs, including the development of National Environmental Study Areas (NESA) and participation in National Environmental Education Development (NEED) in cooperation with local school districts.

By teaching children early in life about their responsibilities for maintaining a balanced environment, it is hoped that there will be a growing understanding and awareness of our environment among park visitors that will contribute to fewer problems in the future management of parks.

Examples of Recent Accomplishments:

Living Interpretation. Twenty-five areas inaugurated new living interpretation programs for park visitors. These are action-oriented approaches aimed at directly involving visitors in the historical and environmental meanings of parks through costumed demonstrations of early ways of life in America and through leading visitors in participating in historical and modern activities relating to the parks. Typical programs include reenactments of Revolutionary War period town meetings at Minute Man National Historical Park, daily demonstrations of building farm implements and blacksmithing at Herbert Hoover National Historic Site, a horse-mounted interpreter at Crater Lake National Park playing the role of an 1853 prospector who discovered the lake, visitors learning the knack of using primitive Indian chipping tools at Russell Cave National Monument, clamming and surf-fishing demonstrations at Cape Cod National Seashore, and new living farms at Blue Ridge Parkway, Chickamauga and Chattanooga National Military Park, Great Smoky Mountains National Park and Shiloh National Military Park.

Environmental Education. Twenty-eight new National Environmental Study Areas were established in the parks and 275 workshops were held for training teachers in the use of these areas for their grade school students. In cooperation with the National Park Foundation, teachers' guides, student classroom guides and student outdoor books were produced for distribution for the third, fourth and fifth grade levels, as part of the NPS-sponsored National Environmental Educational Development program. Twenty-four Students-Toward-Environmental-Participation programs aimed at high school student environmental awareness

were established in cooperation with the U.S. Commission to UNESCO. Environmental awareness classes were conducted for 50,000 Boy Scouts attending the two National BSA Jamborees.

Art and Cultural Interpretation. Twelve areas developed major new interpretive thrusts aimed at helping visitors appreciate the human history and values in parks through art and cultural presentations. Typical examples include daily productions of "It Happened Here," a student drama of the revolutionary printing of the Declaration of Independence at Independence National Historical Park, "Symphonies Under the Stars" at National Capital Parks, and Spanish language folk festivals, craft demonstrations and art displays to accelerate cultural exchange at Chamizal National Memorial.

Indian Cultural Demonstrations. Demonstrations of pottery making, basket weaving, jewelry production and ancient dancing by modern American Indian NPS employees were introduced at eight parks; similar programs at eight other parks have been expanded.

Minority Culture Interpretation. Major new dimensions of interpreting minority cultures and their contributions to our society were added to the interpretive program in nine areas.

Transportation System Interpretation. Free public interpretive transportation systems were installed at Everglades National Park, Mesa Verde National Park and Lyndon B. Johnson National Historic Site. Interpretation was provided by uniformed personnel or by tape recorded messages on these new systems as well as on the established systems at Yosemite, Everglades and Mount McKinley National Parks.

Expanding Park Visitor Seasons. New interpretive activity programs were developed for many parks to extend their season of use under the Parks-For-All-Seasons concept. Demonstrations of winter use activities such as snowshoeing and cross-country skiing were initiated or expanded at nearly all northern climate parks and traditional interpretive programs were extended into the off-season at many other parks.

Interpretive Forums. Six areas instituted regularly scheduled public forums for the purpose of encouraging visitor interest and understanding of park management policies and for providing public input into local management philosophy. Some of these have taken the form of ranger-conducted rap sessions for young adult visitors.

Innovative Interpretive Programs. Great Smoky Mountains National Park developed an interpretive TV program which is broadcast by cable during prime evening time to visitors staying in the park gateway town of Gatlinburg, Tennessee. The purpose of the daily three-hour program is to provide pre-visit orientation on the national park including live, up-to-the-minute information on park conditions.

Yellowstone National Park was designated by the Federal Communications Commission as one of two prototype areas in the United States for limited-range interpretive radio broadcasts beamed at visitor automobile radios. Yellowstone developed and operated a system of 30 radio transmitters throughout the park during the 1973 visitor season. Based upon results of this experiment the FCC hopes to designate a single frequency for limited-range public service broadcasts throughout the Nation for parks and public highways.

The Western Regional Office developed an "Environmental Living Program" for several parks in which young visitors are taught to play roles in recreating natural and cultural environments of the past. This program was adopted by the Bicentennial Commissions of California and Arizona as a major element for their Bicentennial year program.

Informational Publications

The interpretive and visitor services program is further extended to park visitors by providing publications to allow the visitor to prepare for and learn about a park's unique resources through a visual reference.

The Service plans to produce 300 publications in Fiscal 1975 with a gross printing of 26.6 million copies to meet the visitor projection of 235.8 million in that year. This will provide, 1 folder for every 11 visits.

The National Park Service publications program has three main objectives: (1) the extension in both units and quantities of a small but informative basic folder given to park visitors; (2) the expansion of specialized publications such as guidebooks, handbooks, and posters made available at a reasonable price to park visitors who want particular information beyond the initial give-away material; (3) expansion in the sale and distribution of NPS publications through the Government Printing Office, particularly to students for school related activities, and to vacationers prior to their actual travel.

The projected publications programs for the current and budget years are as follows:

Fiscal 1974

	Number	Copies
FREE PUBLICATIONS		
Informational minifolders	144	14,575,000
Interpretive folders	98	7,160,000
General informational publications	3	542,000
SALES PUBLICATIONS	16	48,000
TOTAL	261	22,325,000

Fiscal 1975

	Number	Copies
FREE PUBLICATIONS		
Informational minifolders	160	17,500,000
Interpretive folders	110	8,000,000
General informational publications	10	1,060,000
SALES PUBLICATIONS	20	40,000
TOTAL	300	26,600,000

Examples of Recent Accomplishments: The Service in Fiscal 1973 carried on its work to make larger numbers of publications available to the public through the sales outlets of the Government Printing Office and park areas. A general estimate of NPS-GPO sales for Fiscal 1973 is $500,000. The profit factor is roughly 50 percent of the selling price, so some $250,000 was returned to the General Treasury from this program. The Service, in order to increase the number of items available for sale through GPO, invested in nine new sales publications.

Production figures for Fiscal 1973 are as follows: Minifolders - 138 units printed in a quantity of 14,170,000; Free Regular 4" x 9-1/4" folders - 100 units printed in a quantity of 7,750,000; General Informational Folders - three units printed in a quantity of 2,040,000. This program now provides about 22,000,000 pieces of literature for free distribution annually to visitors to the National Park System.

Volunteers-in-Parks

The Volunteers-in-Parks program, authorized by Public Law 91-357, was inaugurated on December 30, 1970. Since that time the program has made significant contributions in enhancing visitor services. During Fiscal 1973, the Volunteers-in-Parks program utilitized the services of approximately 8,300 persons for a total donated time of 254,580 hours. Volunteers are from all age groups. The largest percentage (51 percent) of volunteers are age 21 or under; however, 11 percent of our volunteers are from the over 50 age group.

Living history programs and general interpretation of the parks accounted for the largest share of donated time (total 58 percent). Many programs are designed and implemented almost entirely by volunteers who research the period and the activity, design and make their own costumes and select the aspects and methods to make this historic period or event truly living history.

Interpretive innovations have been possible through the use and often through the initiative of volunteers. Volunteers have assisted the Service in providing a more varied interpretive program to park visitors. The interpreters represent a wide range of ages, interests, and social backgrounds which contribute to communication with a wider audience and promote better relations and cooperation among diverse groups of park users.

In Fiscal 1974, $100,000 was appropriated to cover the costs of uniforms, costumes, travel and other direct costs of the volunteer program. The same program level is proposed for Fiscal 1975.

Examples of Recent Accomplishments: In Fiscal 1973, total participation in the Volunteers-in-Parks program was 8,328 volunteers who contributed 254,580 hours. An example of how the VIP program has been effective in extending an added dimension to the interpretive program and other activities is the program underway at the Light Ship at Haines Point in Washington, D.C. This ship serves as a floating laboratory that brings together adult volunteers, youth volunteers, park staff, three universities' faculties and students, an explorer scout troop and class from the local educational systems. The purpose of this floating classroom is to introduce visitors to the Potomac River and its environs.

In Fiscal 1973, participation in the VIP program by activity and age group was as follows:

Participation by Activity	Percent
Living History	34.4
Interpretation	23.3
Arts and Crafts	3.6
Archeology	1.1
History	.6
Natural Science	1.3
Environmental Study Area	2.2
Resource Management	6.7
Others (Miscellaneous)	5.1
Pest Control - Hawaii	10.0
Ushers - Wolf Trap	6.3
Cleanup	5.4
	100.0

Participation by Age Group	Percent
Below 18	33.0
18 - 21	18.0
22 - 30	18.5
31 - 40	11.0
41 - 50	8.5
51 - 60	6.0
Over 61	5.0
	100.0

Resources Management

Natural resources management is unique in that it recognizes the concept of preservation and perpetuation of a total environment rather than the production of consumable products, and may include such tools as prescribed burning for ecological and habitat management. Programs utilizing fire as a resource management tool have been inaugurated at Yosemite and Everglades National Parks, and similar program details are being developed for application at Yellowstone and Grand Teton National Parks.

Back-country and wilderness management as it relates to the resource as well as to visitor use of the resource will be strengthened through such measures as determination of carrying capacity and subsequent limitation on daily use. Results of pilot studies and use management programs such as those being carried out at Great Smoky Mountains, Rocky Mountain and Sequoia-Kings Canyon National Parks will determine the feasibility of future application at other parks. Back-country management plans are completed or in the review process for those parks having any appreciable back-country units.

Examples of Recent Accomplishments: The Service implemented a program on the Colorado River in the areas of the Grand Canyon complex to reduce the 96,600 visitor use days in 1972 to 55,000 visitor use days by 1977. During this period, standards for optimum river use will be established and studies performed to maintain the unique wilderness of this outstanding whitewater river and area complex.

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Back-country management plans were developed and implemented in over 50 areas of the System. These programs allow for optimum visitor use and enjoyment of the backcountry in each of these unique areas without damage to the resources by overuse or misuse. Back-country programs have been implemented in such areas as Yosemite, Great Smoky Mountains, Zion, Rocky Mountain, Yosemite, Glacier, Acadia, Voyageurs, Isle Royale, Carlsbad Caverns, Sequoia-Kings Canyon, and Olympic National Parks. The programs will be utilized on a continuing basis and include provisions of permits, lengths of stay, type of use permitted, carrying capacities, etc.

Black bear studies were made in Shenandoah National Park in conjunction with the Virginia Conservation Department to determine the feeding, breeding and travel habits of bears within the park and other sections of the State.

A black bear management plan was developed and approved for use in Yosemite and Sequoia-Kings Canyon National Parks. General procedures for handling "rogue" bears were established with optimum concern for the bears, safety of visitors, and protection of property.

A cooperative effort by Lake Mead National Recreation Area and Zion National Park and the State Game Department of Nevada and Utah was effected to reestablish the rare Desert Bighorn Sheep in Zion National Park. Twelve animals (rams, ewes, and lambs) are being managed in 120 acres closed to visitor use. Stock from this flock, once established, will be used to stock other areas, where the animals have been extirpated.

Natural fire programs were carried out in Rocky Mountain, Grand Teton, Yellowstone, Glacier, Sequoia-Kings Canyon, and Yosemite National Parks. Natural fire programs are also being developed in numerous other areas. These programs are absolutely essential in perpetuating the indigenous plant and animal communities for which these parks in part were established. Fire is necessary for eliminating hazardous fire fuels, preparing seedbeds, cycling nutrients, reducing the number of trees susceptible to attack by insects and disease and providing conditions which favor wildlife.

Prescribed fire programs were carried on in Everglades and Grand Canyon National Parks; and Bandelier, Saguaro and Wind Cave National Monuments. Prescribed fire programs are also being developed for numerous other areas. These plans provide the same benefits as natural fire programs, plus they afford the opportunity for fire managers to establish the time of fire.

Security and Protection

The purpose of the Security and Protection program of the National Park Service is to assure for every visitor a park experience that is personally meaningful and free from apprehensions as to the safety of his person and his property. During calendar year 1972, major crime (homicide, rape, robbery, assault, burglary, grand larceny and auto theft) decreased for the second straight year with 2,722 major offenses reported in 1972, as opposed to 2,784 major offenses reported in 1971. Although there was a reduction of major crimes in calendar year 1972, there were still 2,722 visitors and their families who fell victim to the commission of serious offenses.

The downward trend in major crimes reported in calendar years 1971 and 1972 was due primarily to expanded training programs in law enforcement and a renewed emphasis on the part of the park managers towards effective enforcement programs. There are still some 300 park rangers who are in need of law enforcement training.

Although traffic fatalities showed a decrease, the total number of motor vehicle accidents increased in calendar year 1972 by 665 accidents. There were 6,720 motor vehicle accidents in 1971 and 7,385 in 1972.

The Service continued to experience demonstrations requiring large numbers of manpower in Fiscal 1973. Notable among these were the activities surrounding the Presidential Inauguration and the visit of General Secretary Leonid Ilyich Breshnev, U.S.S.R. On 209 occasions the U.S. Park Police provided security for the President or foreign dignitaries.

Examples of Recent Accomplishments: In the first half of Fiscal 1974, the Service has intensified its efforts to develop quality law enforcement throughout the National Park Service.

In June 1973, the Law Enforcement Statistical Reporting System was implemented. This system will ultimately provide a means for recording law enforcement data throughout the National Park Service. All regions are scheduled for 100 percent participation during the first part of 1974. Another major accomplishment was the standardization of law enforcement equipment. Guidelines were established governing the selection and use of firearms and other equipment, training and qualifications of personnel, care of firearms and inspections and the related responsibilities of the Superintendents.

In October 1973, the Horse-Use Task Force Report was developed to provide uniform guidelines for the selection, purchase and training of horses and mules for the Service. Additionally, standards for selection and training of personnel to be assigned to horse and mule related duties were established. The Task Force designated Washington, D.C., Austin, Texas (LBJ Ranch) and San Francisco as the horse and mule training centers.

The comprehensive law enforcement training program, initiated in 1971, provided some 35 rangers and 34 park policemen specialized training thus far in Fiscal 1974.

Safety

The objective of the Service's safety program is the protection of human life, prevention of accidental injuries and damage to property and equipment, involving employees of the Service, employees of the many concessioners and construction contractors and the many millions of visitors to Service areas.

The program is formulated and executed by a staff consisting of a Safety Officer and Safety Management Assistant in the Washington Office, a Safety Engineer in the Denver Service Center, and a safety unit in each of the regions and in the National Capital Parks.

Visitor protection is a growing problem in national park management. For example, there were 215,540,400 visits recorded throughout the National Park System in Fiscal 1973--more than double the visitation of Fiscal 1964 which was 107,446,700. Much of this increased visitation is comprised of urban residents from large metropolitan areas--a visitor totally unfamiliar with the park environment and the hazards therein.

To cope with this situation, an intensified public safety campaign has been undertaken. This campaign is aimed primarily at alerting the visitors to the dangers of the parks. New and more effective ways of communicating this to the visitor are being developed and implemented.

An intensified employee safety program is also underway. Implementation of the provisions of the Occupational Safety and Health Act of 1970 and achieving full compliance with the applicable standards promulgated under this Act, along with compliance with Executive Order 11612 entitled, "Occupational Safety and Health Programs for Federal Employees," will continue to be a major thrust of our employee safety program during Fiscal 1975.

Examples of Recent Accomplishments: An intensive, Systemwide public safety campaign has been implemented in an effort to reduce the number of visitor injuries. Communicating the unrecognized dangers of park areas to the visitor is the major thrust of this campaign. As a part of this increased communication effort, the "Danger In the National Park System" pamphlet was revised and distributed to all areas for issuance at entrance stations and visitor centers. In addition, posters with hard-hitting safety messages were posted throughout the National Park System and employees have been called upon to redouble their efforts to insure greater visitor safety.

To aid in the implementation of the provisions of the Occupational Safety and Health Act of 1970, a new pocket manual entitled "SAFETY MANAGEMENT-guidelines, requirements and responsibilities," was printed and issued to all employees. This manual established health and safety programing responsibilities, requirements and standards for all operations performed by the National Park Service, its contractors, subcontractors, concessioners and permittees.

Maintenance and Rehabilitation of Park Areas

Program of Work: Under this program, activities are carried out to maintain facilities and resources while safeguarding and conserving the natural, historical, and archeological features, as well as the recreational values of the park areas. The objective of the maintenance program is directed toward preventative maintenance efforts.

The preventive maintenance program allows the Service to avoid major rehabilitation or replacement of park facilities thereby reducing overall costs. Adequate maintenance of facilities extends visitor access to larger areas and promotes wider dispersion of the visitor load over the entire area.

The Service's maintenance workload involves repair and rehabilitation for approximately 10,000 miles of roads for visitor use and park access, in addition to the many hundreds of structures throughout the System.

A major area of concern is the maintenance of water and sewer systems to assure compliance with the requirements of the Federal Water Pollution Control Act, the National Environmental Policy Act, and Executive Order 11507 relating in part to the protection and enhancement of water resources quality. In order to assure the public and park employees a safe water supply, a continuing program of chemical and bacteriological water sampling is a key maintenance activity. Sewer systems must be operated and maintained in accordance with prescribed standards pertaining to the disposal and quality of effluent. The adaptation of new waste treatment methods and technology and minimum water use techniques contribute to the preservation, protection, and conservation of park water resources and related natural environment. A prime requisite to a productive maintenance program is the periodic training of maintenance employees to enhance their performance and knowledge of new methods and technologies applicable to the maintenance function.

Criteria have been promulgated to delineate standards necessary for an adequate level of maintenance. They include standards for maintenance of roads and trails and buildings and utilities. These standards serve as an important tool in identifying those areas deficient in maintenance needs and supports the establishment of priorities for the maintenance work programs.

Examples of Recent Accomplishments: During Fiscal 1973, considerable progress has been made in the accomplishment of centerline stripping of roads in compliance with new national standards; meeting standards for road signs within the parks and posting of pictured symbol signs for the information and regulatory guidance of visitors; installation of electrical equipment designed to prevent electrical fires; underground installation of powerlines; upgrading of roads including roadside maintenance of shoulders; and planting and seeding to control erosion and landslides.

Maintenance activities have contributed significantly towards Servicewide compliance with Executive Order 11507 entitled "Prevention, Control, and Abatement of Air and Water Pollution at Federal Facilities." Chlorinators have been installed on water and sewer systems at areas such as Lincoln Boyhood and Fredericksburg. At Acadia National Park the installation of a new sewage disposal system has resulted in the elimination of objectionable sewage outflow to the ocean. Malfunctioning septic tanks have been replaced and existing septic tanks have been maintained. A large number of sewage plant operators have been certified under the joint EPA-NPS operator certification training program. Of prime importance is the consummation of an agreement with the Public Health Service resulting in the full-time assignment of seven Public Health Service Officers to the Service to assist Service areas in maintaining and attaining operations at prescribed sanitation standards.

Presently underway, in selected Service areas, is a program to denote on informational, directional, guide, and service signs both metric as well as standard distance measurements. The dual sign system anticipates an increased number of foreign visitors coming to the parks and also the establishment of national policy relating to conversion to the metric system in the United States. The dual system will, therefore, benefit foreign visitors, and provide a useful educational method for school children and the general public to think in metric terms. The selected Service areas are Chamizal, Grand Canyon, Mesa Verde, Lava Beds, Everglades, Colonial, Washington Monument, and Reflecting Pool.

The following statement shows the allocations by park areas, other organizational entities and certain program items of the amount available in fiscal 1974, the proposed increases and amount requested in fiscal 1975 for the Operation of the National Park System (ONPS) appropriation and the operating portion of the Planning, Development and Operation of Recreation Facilities (RF) appropriation. Additionally, the statement lists the new permanent positions requested for 1975, the anticipated visits to each park and the acreage in Federal ownership by park area.

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
HARPERS FERRY CENTER:								
Audiovisual Arts	ONPS	928,000	8,800	936,800				
Informational Publications	ONPS	1,311,300	9,300	1,320,600				
Museum Exhibit Production	ONPS	878,800	8,200	887,000				
Total, Harpers Ferry Center	ONPS	3,118,100	26,300	3,144,400				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
ROCKY MOUNTAIN REGION:								
Badlands NM, S. Dak.	ONPS	465,500	27,400	492,900	Engineer Equipment Operator, Ungr.	1	1,431	151,370
	RF	46,200	3,600	49,800				
	Total	511,700	31,000	542,700				
Bent's Old Fort NHS, Colo.	ONPS	66,700	17,700	84,400	Park Historian, GS-7	1	21	178
					Maintenance Worker, Ungr.	1		
Bighorn Canyon NRA, Mont.-Wyo.	ONPS	610,300	7,400	617,700	Staff Assistant, GS-3	1	243	62,854
					Janitor, Ungr.	1		
	RF	700	--	700				
	Total	611,000	7,400	618,400				
Bryce Canyon NP, Utah	ONPS	440,900	23,600	464,500			432	36,008
	RF	23,700	14,000	37,700				
	Total	464,600	37,600	502,200				
Canyonlands NP, Utah	ONPS	821,400	19,400	840,800	Park Technician, GS-4	1	64	330,556
					Maintenance Worker, Ungr.	1		
	RF	61,500	-12,100	49,400				
	Total	882,900	7,300	890,200				
Arches NP, Utah ...	ONPS	134,300	5,300	139,600			298	63,915
Natural Bridges NM, Utah	ONPS	76,100	4,700	80,800			30	7,177

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Capitol Reef NP, Utah .	ONPS	426,700	4,000	430,700			351	221,102
	RF	3,100	--	3,100				
	Total	429,800	4,000	433,800				
Cedar Breaks NM, Utah	ONPS	79,000	14,500	93,500	Park Ranger, GS-7	1	200	6,165
	RF	2,000	--	2,000				
	Total	81,000	14,500	95,500				
Curecanti Group:								
Headquarters Office	ONPS	280,900	4,100	285,000	Clerk-Typist, GS-4	1		
Black Canyon of the Gunnison NM, Colo.	ONPS	100,000	9,600	109,600			222	13,323
	RF	18,400	--	18,400				
	Total	118,400	9,600	128,000				
Colorado NM, Colo.	ONPS	197,800	29,700	227,500	Clerk-Typist, GS-4	1	539	17,655
	RF	30,600	--	30,600				
	Total	228,400	29,700	258,100				
Curecanti RA, Colo.	ONPS	260,700	100,300	361,000	Park Ranger, GS-9	1	721	41,572
					Administrative Clerk, GS-5	1		
					Clerk-Typist, GS-3	1		
					Maintenance Worker, Ungr.	2		
	RF	10,000	--	10,000				
	Total	270,700	100,300	371,000				
Custer Battlefield NM, Mont.	ONPS	177,600	5,000	182,600	Clerk-Typist, GS-3	1	286	765
Devils Tower NM, Wyo.	ONPS	172,900	3,900	176,800			149	1,347
	RF	13,900	--	13,900				
	Total	186,800	3,900	190,700				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Dinosaur NM, Colo.-Utah	ONPS	635,100	15,600	650,700	Auto Mechanic, Ungr.	1	392	200,362
					Maintenanceman, Ungr.	1		
	RF	12,100	25,300	37,400				
	Total	647,200	40,900	688,100				
Florissant Fossil Beds NM, Colo.	ONPS	77,900	1,100	79,000	Administrative Clerk, GS-4	1	24	4,245
Fort Laramie NHS, Wyo.	ONPS	278,200	5,800	284,000			87	563
Glacier NP, Mont.	ONPS	2,721,200	34,600	2,755,800	Biologist, GS-7	1	1,388	1,011,971
	RF	126,100	30,100	156,200				
	Total	2,847,300	64,700	2,912,000				
Glen Canyon NRA, Ariz.-Utah	ONPS	1,384,300	98,100	1,482,400			1,051	1,159,103
	RF	39,300	--	39,300				
	Total	1,423,600	98,100	1,521,700				
Rainbow Bridge NM, Utah	ONPS	113,000	--	113,000			54	160
Golden Spike NHS, Utah	ONPS	229,100	6,000	235,100			72	2,172
	RF	19,900	-6,600	13,300				
	Total	249,000	-600	248,400				
Grand Teton NP, Wyo.	ONPS	1,972,300	40,800	2,013,100	Personnel Clerk, GS-5	1	3,108	304,501
					Clerk, GS-4	1		
					Operator, General, Ungr.	1		
					Signmaker, Ungr.	1		
	RF	189,800	-24,800	165,000				
	Total	2,162,100	16,000	2,178,100				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Fossil Butte NM, Wyo.	ONPS	60,400	600	61,000			2	7,038
John D. Rockefeller, Junior, Mem. Parkway, Wyo.	ONPS	119,200	2,900	122,100			1,800	23,700
Great Sand Dunes NM, Colo.	ONPS	182,000	22,900	204,900			183	35,615
	RF	29,300	--	29,300				
	Total	211,300	22,900	234,200				
Mesa Verde NP, Colo.	ONPS	1,149,700	26,500	1,176,200	Warehouseman, GS-5	1	470	51,489
	RF	20,600	149,800	170,400				
	Total	1,170,300	176,300	1,346,600				
Hovenweep NM, Colo.-Utah	ONPS	42,400	700	43,100			13	785
Yucca House NM, Colo.	ONPS	1,000	--	1,000			--	10
Mount Rushmore NMem., S. Dak.	ONPS	503,000	28,800	531,800			1,962	1,246
Pipe Spring NM, Ariz.	ONPS	80,600	4,400	85,000	Park Technician, GS-5	1	20	40
	RF	8,500	--	8,500				
	Total	89,100	4,400	93,500				
Rocky Mountain NP, Colo.	ONPS	1,669,200	65,400	1,734,600	Electrician, Ungr.	1	2,750	261,035
	RF	166,900	25,000	191,900				
	Total	1,836,100	90,400	1,926,500				
Shadow Mountain RA, Colo.	ONPS	442,800	26,200	469,000			221	15,744

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Theodore Roosevelt NMem. Pk., N. Dak.	ONPS	506,000	9,500	515,500	Maintenanceman, Ungr.	1	779	69,516
	RF	33,800	--	33,800				
	Total	539,800	9,500	549,300				
Fort Union Trading Post NHS, Mont.-N. Dak.	ONPS	36,600	2,700	39,300			3	121
Timpanogos Cave NM, Utah	ONPS	174,200	8,600	182,800	Maintenance Worker, Ungr.	1	185	250
	RF	4,400	--	4,400				
	Total	178,600	8,600	187,200				
Wind Cave NP, S. Dak.	ONPS	504,000	34,200	538,200			921	28,060
	RF	21,000	--	21,000				
	Total	525,000	34,200	559,200				
Jewel Cave NM, S. Dak.	ONPS	146,400	18,500	164,900	Maintenanceman, Ungr.	1	80	1,275
Yellowstone NP, Idaho-Mont.-Wyo.	ONP	5,880,700	149,000	6,029,700	Park Technician, GS-5	1	2,350	2,219,737
	RF	414,700	--	414,700				
	Total	6,295,400	149,000	6,444,400				
Big Hole NB, Mont.	ONPS	50.700	3,000	53,700	Maintenanceman, Ungr.	1	31	656
Grant-Kohrs Ranch NHS, Mont.	ONPS	103,900	300	104,200			--	1,160
Zion NP, Utah	ONPS	710,100	15,800	725,900	Irrigator, Ungr.	1	1,019	141,274
	RF	32,300	11,800	44,100				
	Total	742,400	27,600	770,000				
Total, Rocky Mountain Region	ONPS	24,084,800	898,600	24,983,400				
	RF	1,328,800	216,100	1,544,900				
	Total	25,413,600	1,114,700	26,528,300				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget Position Title and Grade Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
NORTH ATLANTIC REGION:							
Acadia NP, Maine	ONPS	726,600	26,300	752,900		2,665	34,940
	RF	30,000	--	30,000			
	Total	756,600	26,300	782,900			
Saint Croix Island NM, Maine	ONPS	31,000	--	31,000		--	22
Boston Group:							
Headquarters Office ..	ONPS	206,400	3,200	209,600			
Adams NHS, Mass.	ONPS	137,000	1,800	138,800		27	8
	RF	2,400	--	2,400			
	Total	139,400	1,800	141,200			
John Fitzgerald ..... Kennedy NHS, Mass.	ONPS	76,500	4,600	81,100		34	--
	RF	3,200	--	3,200			
	Total	79,700	4,600	84,300			
Longfellow NHS, Mass.	ONPS	176,400	1,800	178,200			
Minute Man NP, Mass.	ONPS	428,400	28,300	456,700		650	576
	RF	2,300	--	2,300			
	Total	430,700	28,300	459,000			
Salem Maritime NHS, Mass.	ONPS	134,000	18,200	152,200		453	9
	RF	2,600	--	2,600			
	Total	136,600	18,200	154,800			
Saugus Iron Works NHS, Mass.	ONPS	164,200	1,700	165,900		34	8
Cape Cod NS, Mass.	ONPS	1,072,900	34,000	1,106,900		5,280	24,299
	RF	53,500	45,800	99,300			
	Total	1,126,400	79,800	1,206,200			

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget Position Title and Grade Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Manhattan Properties:							
Headquarters Office ..	ONPS	43,700	800	44,500			
Castle Clinton NM, N.Y.	ONPS	38,300	500	38,800			1
Federal Hall NMem, N.Y.	ONPS	272,200	5,000	277,200		92	
General Grant NMem, N.Y.	ONPS	385,600	2,600	388,200		90	1
Hamilton Grange NMem, N.Y.	ONPS	56,800	1,300	58,100		6	1
Theodore Roosevelt Birthplace NHS, N.Y.	ONPS	106,300	1,200	107,500		15	
	RF	14,000	--	14,000			
	Total	120,300	1,200	121,500			
Morristown NHP, N.J. ...	ONPS	469,800	21,400	491,200		475	1,340
	RF	5,300	--	5,300			
	Total	475,100	21,400	496,500			
Edison NHS, N.J.	ONPS	512,900	22,900	535,800		59	20
	RF	3,900	--	3,900			
	Total	516,800	22,900	539,700			
Roger Williams NMem., R.I.	ONPS	28,600	400	29,000			
Sagamore Hill NHS, N.Y.	ONPS	258,400	4,400	262,800		174	85
	RF	13,000	--	13,000			
	Total	271,400	4,400	275,800			

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Fire Island NS, N.Y. ...	ONPS	765,100	38,900	804,000			590	2,731
	RF	--	50,000	50,000				
		765,100	88,900	854,000				
Gateway NRA, N.J.-N.Y. .	ONPS	6,475,200	80,900	6,556,100	District Park Ranger, GS-12	1	3,500	3,716
					Maintenance Supervisor, GS-11	2		
					Supervisory Park Ranger, GS-11	2		
					Supervisory Park Naturalist, GS-11	2		
					Supervisory Park Ranger, GS-9	4		
					Supervisory Park Naturalist, GS-9	2		
					Park Technician, GS-5.	2		
					Secretary-Steno, GS-5	4		
					Foreman, Ungr.	2		
					Building Repairman, Ungr.	2		
					Maintenanceman, Ungr.	4		
					Mechanic, Ungr.	1		
					Caretaker, Ungr.	2		
					Janitor, Ungr.	1		
	RF	--	380,000	380,000				
	Total	6,475,200	460,900	6,936,100				
Home of Franklin D.	ONPS	444,900	11,800	456,700			312	188
Roosevelt NHS, N.Y.	RF	46,000	--	46,000				
	Total	490,900	11,800	502,700				
Vanderbilt Mansion NHS, N.Y.	ONPS	444,800	11,800	456,600			237	212

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Saratoga NHP, N.Y.	ONPS	292,100	45,600	337,700			304	2,432
Saint-Gaudens NHS, ...	ONPS	98,300	1,200	99,500			13	83
N.H.	RF	2,600	--	2,600				
	Total	100,900	1,200	102,100				
Statue of Liberty NM, ..	ONPS	879,700	42,300	922,000			1,129	58
N.J.-N.Y	RF	31,600	--	31,600				
	Total	911,300	42,300	953,600				
Subtotal, Parks	ONPS	14,726,100	412,900	15,139,000				
	RF	210,400	475,800	686,200				
	Total	14,936,500	888,700	15,825,200				
Assistant to the Regional Director -- New York	ONPS	418,400	6,900	425,300				
Total, North Atlantic Region	ONPS	15,144,500	419,800	15,564,300				
	RF	210,400	475,800	686,200				
	Total	15,354,900	895,600	16,250,500				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
NATIONAL CAPITAL PARKS:								
Antietam NBS, Md.	ONPS	232,800	7,100	239,900			428	819
Chesapeake and Ohio Canal NHP, Md.-D.C.-W.Va.	ONPS	978,200	22,300	1,000,500				9,521
Catoctin Mountain Park, Md.	ONPS	536,200	8,000	544,200			1,694	5,764
Baltimore-Washington Parkway, Md.	ONPS	617,900	4,300	622,200				2,431
George Washington Memorial Parkway, Va.-Md.	ONPS	4,667,400	35,600	4,703,000			6,275	6,297
Harpers Ferry NHP, Md.-W.Va.	ONPS	694,400	74,700	769,100	Park Technician, GS-5	2	1,363	1,326
Manassas NBP, Va.	ONPS	232,900	2,600	235,500			734	2,693
National Capital Parks-East	ONPS	3,627,800	61,100	3,688,900	Gardener, Ungr. Laborer, Ungr. Park Technician, GS-5	1 1 3	8,547	
National Capital Parks-West	ONPS	14,039,700	378,600	14,418,300	Maintenance Clerk, GS-5	1	6,662	10,421
	RF	39,500	--	39,500				
	Total	14,079,200	378,600	14,457,800				
Ford's Theatre NHS, D.C.	ONPS	523,000	5,000	528,000			745	

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Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
National Visitor Center, D.C.	ONPS	387,800	132,200	520,000				
Prince William Forest Park, Va.	ONPS	910,400	7,700	918,100			511	17,348
U. S. Park Police	ONPS	10,760,900	149,300	10,910,200	Guard, GS-4	8		
Wolf Trap Farm Park, Va.	ONPS	1,336,100	73,500	1,409,600			469	130
Office of the Director, NCP	ONPS	2,898,500	45,400	2,943,900	Safety Officer, GS-11	1		
Total-National Capital Parks	ONPS	42,444,000	1,007,400	43,451,400				
	RF	39,500	--	39,500				
	Total	42,483,500	1,007,400	43,490,900				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
MID-ATLANTIC REGION:								
Appomattox Court House NHP, Va.	ONPS	180,200	5,800	186,000			284	995
	RF	21,500	--	21,500				
	Total	201,700	5,800	207,500				
Assateague Island NS, Md.-Va.	ONPS	698,000	7,100	705,100			2,149	15,241
	RF	12,000	20,000	32,000				
	Total	710,000	27,100	737,100				
Booker T. Washington NM, Va.	ONPS	119,800	2,300	122,100			37	218
Colonial NHP, Va.	ONPS	1,277,400	179,600	1,457,000	Park Technician, GS-7	2	10,525	8,068
					Park Technician, GS-5	1		
					Foreman, Ungr.	1		
					Painter, Ungr.	1		
					Maintenance Worker, Ungr.	2		
	RF	20,400	60,000	80,400				
	Total	1,297,800	239,600	1,537,400				
Delaware Water Gap NRA, N.J.-Pa.	ONPS	1,013,600	11,700	1,025,300			614	22,334
Fort McHenry NM & HS, Md.	ONPS	348,900	3,900	352,800			520	43
Fredericksburg and Spotsylvania County Battlefields Mem. NMP, Va.	ONPS	550,600	9,000	559,600			1,092	3,916

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
George Washington Birthplace NM, Va.	ONPS	370,100	4,900	375,000			253	456
	RF	4,600	--	4,600				
	Total	374,700	4,900	379,600				
Gettysburg NMP, Pa.	ONPS	883,200	19,400	902,600			3,918	3,175
	RF	25,800	--	25,800				
	Total	909,000	19,400	928,400				
Eisenhower NHS, Pa. ..	ONPS	159,000	3,400	162,400				493
Hopewell Village NHS, Pa.	ONPS	242,600	7,300	249,900			163	848
Independence NHP, Pa. ..	ONPS	2,213,800	537,900	2,751,700	Supervisory Park Ranger, GS-9	1	2,476	17
					Supervisory Park Technician, GS-7	1		
					Park Technician, GS-5	4		
					Park Technician, GS-4	7		
					Maintenanceman, Ungr.	1		
					Painter, Ungr.	1		
					Maintenance Worker, Ungr.	1		
					Janitor, Ungr.	8		
Thaddeus Kosciuszko NMem., Pa.	ONPS	10,000	--	10,000			--	--
Petersburg NB, Va.	ONPS	290,900	4,700	295,600			324	1,265
Richmond NBP, Va.	ONPS	305,100	5,100	310,200			491	742

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget Positon Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Shenandoah NP, Va.	ONPS	2,021,000	111,100	2,132,100			2,910	194,244
	RF	405,500	-120,500	285,000				
	Total	2,426,500	- 9,400	2,417,100				
Western Pennsylvania Group:								
Headquarters Office	ONPS	40,900	600	41,500				
Allegheny Portage Railroad NHS, Pa. .	ONPS	135,200	2,600	137,800			59	656
Fort Necessity NB, Pa.	ONPS	155,100	2,300	157,400			285	350
Johnstown Flood NMem., Pa.	ONPS	34,700	500	35,200			63	54
Total, Mid-Atlantic Region	ONPS	11,050,100	919,200	11,969,300				
	RF	489,800	- 40,500	449,300				
	Total	11,539,900	878,700	12,418,600				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
SOUTHEAST REGION:								
Andersonville	ONPS	253,100	2,400	255,500			176	450
Biscayne NM, Fla.	ONPS	348,600	31,500	391,100	Maintenance Foreman, Ungr.	1	382	94,334
					Park Technician, GS-5	1		
					Maintenance Worker, Ungr.	1		
Blue Ridge Parkway, N.C.-Va.-Ga.	ONPS	4,010,700	109,600	4,120,300	Park Technician, GS-7	1	14,652	63,048
					Secretary-Steno, GS-5	1		
					Park Ranger, GS-7	1		
	RF	69,300	--	69,300				
	Total	4,080,000	109,600	4,189,600				
Carl Sandburg Home NHS, N.C.	ONPS	140,900	81,400	222,300	Park Ranger, GS-7	1		247
					Maintenance Supervisor, Ungr.	1		
	RF	14,200	21,600	35,800				
	Total	155,100	103,000	258,100				
Guilford Courthouse NMP, N.C.	ONPS	205,500	1,500	207,000			1,339	220
Cape Hatteras NS, N.C.	ONPS	1,796,300	39,900	1,836,200	Park Technician (Interp.), GS-5	1	1,918	28,500
	RF	82,700	--	82,700				
	Total	1,879,000	39,900	1,918,900				
Ft. Raleigh NHS, N.C.	ONPS	214,600	6,600	221,200			304	140
Wright Brothers NMem., N.C.	ONPS	214,700	6,600	221,300			418	431
Cape Lookout NS, N.C.	ONPS	63,600	400	64,000				--

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Castillo de San Marcos NM, Fla.	ONPS	314,000	20,100	334,100			750	20
	RF	32,400	--	32,400				
	Total	346,400	20,100	366,500				
Fort Matanzas NM, Fla.	ONPS	23,000	--	23,000			325	299
	RF	--	38,600	38,600				
	Total	23,000	38,600	61,600				
Chickamauga and Chattanooga NMP, Ga.-Tenn.	ONPS	616,800	55,800	672,600	Park Technician, GS-5	1	15,177	7,976
					Park Technician, GS-4	1		
					Supply Clerk, GS-3	1		
					Painter, Ungr.	1		
Christiansted NHS, Virgin Islands	ONPS	155,100	14,100	169,200			27	27
Buck Island Reef NM, Virgin Island	ONPS	13,600	--	13,600			30	850
Cumberland Gap NHP, Ky.-Va.-Tenn.	ONPS	638,700	34,500	673,200	Park Technician, GS-4	1	434	20,219
	RF	4,300	6,000	10,300				
	Total	643,000	40,500	683,500				
Everglades NP, Fla. ..	ONPS	2,543,900	77,100	2,621,000	Park Technician, GS-5	1	2,594	1,378,311
					Sewage Treatment Plant Operator, Ungr.	1		
					Supply Clerk, GS-5	1		
	RF	352,700	8,100	360,800	Teller, GS-3	2		
	Total	2,896,600	51,500	2,948,100				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
DeSoto NMem., Fla. ..	ONPS	128,100	4,600	132,700			136	25
Fort Jefferson NM, Fla.	ONPS	89,600	44,600	134,200	Park Ranger/Hist., GS-7 Mason, Ungr.	1 1	29	47,125
Fort Caroline NMem., Fla.	ONPS	128,600	25,700	154,300			79	128
Fort Donelson NMP, Tenn.	ONPS	273,000	8,100	281,100			1,208	528
Fort Frederica NM, Ga.	ONPS	171,100	12,000	183,100			229	211
	RF	18,500	--	18,500				
	Total	189,600	12,000	201,600				
Cumberland Island NS, Ga.	ONPS	314,800	32,500	347,300	Superintendent, GS-13 Administrative Assistant, GS-9	1 1		641
	RF	--	90,000	90,000				
	Total	314,800	122,500	437,300				
Fort Pulaski NM, Ga.	ONPS	289,700	2,300	292,000			295	5,357
	RF	13,300	--	13,300				
	Total	303,000	2,300	305,300				
Fort Sumter NM, N.C.	ONPS	405,600	25,400	431,000			171	64
Great Smoky Mountains NP, N.C.-Tenn.	ONPS	3,377,500	177,200	3,549,700	Park Ranger, GS-7 Clerk-Steno, GS-4 Sanitarian, GS-9	5 1 1	9,998	514,603
	RF	306,000	91,300	397,300				
	Total	3,683,500	263,500	3,947,000				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousnads)	Acreage
Andrew Johnson NHS, Tenn.	ONPS	159,000	3,000	162,000			48	17
	RF	1,600	--	1,600				
	Total	160,600	3,000	163,600				
Gulf Islands NS, Fla.-Miss.	ONPS	1,176,100	37,500	1,213,600	Park Ranger, GS-7	1	940	58,386
					Park Ranger (Interp,), GS-7	1		
					Clerk Steno, GS-4	3		
					Maintenance Foreman, Ungr.	1		
	RF	64,500	--	64,500				
	Total	1,240,600	37,500	1,278,100				
Horseshoe Bend NBP, Ga.	ONPS	180,900	2,500	183,400			403	2,040
Kennesaw Mountain NBP, Ga.	ONPS	315,000	13,700	328,700	Park Ranger, GS-7	1	6,548	2,883
					Park Technician, GS-5	1		
					Maintenanceman, Ungr.	1		
	RF	19,400	--	19,400				
	Total	334,400	13,700	348,100				
Kings Mountain NMP, S.C.	ONPS	207,600	13,900	221,500			411	3,950
Cowpens NB, S.C. ...	ONPS	1,100	--	1,100			31	1

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Mammoth Cave NP, Ky. .	ONPS	1,489,500	62,800	1,552,300	Park Ranger (Interp.), GS-7	1	1,931	51,304
					Park Technician, GS-5	1		
	RF	53,800	--	53,800				
	Total	1,543,300	62,800	1,606,100				
Abraham Lincoln Birthplace NHS, Ky.	ONPS	202,200	8,400	210,600			511	117
Mar-A-Lago NHS, Fla.	ONPS	--	48,200	48,200	Superintendent, GS-12	1		--
					Steward, GS-9	1		
Moores Creek NMP, N.C.	ONPS	146,300	1,800	148,100			37	42
Natchez Trace Parkway Ala.-Miss.-Tenn. Brices Cross Roads NBS, Miss.-and Tupelo NB, Miss.	ONPS	2,872,900	35,900	2,908,800	Park Ranger, GS-9	2	14,845	46,253
					Park Guide, GS-4	1		
	RF	13,200	--	13,200				
	Total	2,886,100	35,900	2,922,000				
Shiloh NMP, Tenn.	ONPS	332,500	43,600	376,100			639	3,593
Stones River NB, Tenn.	ONPS	148,200	14,300	162,500	Maintenance Worker, Ungr.	1	127	351
Vicksburg NMP, Miss.	ONPS	473,100	24,400	497,500	Clerk-Typist, GS-4	1	1,227	1,794
Gunboat Cairo	ONPS	42,100	--	42,100				
Ocmulgee NM, Ga.	ONPS	185,800	33,500	219,300			112	683
	RF	9,700	--	9,700				
	Total	195,500	33,500	229,000				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Russell Cave NM, Ala.	ONPS	96,000	1,700	97,700			27	310
San Juan NHS, Puerto Rico	ONPS	532,900	25,700	558,600	Mason, Ungr.	1	1,329	53
					Mason Helper, Ungr.	1		
	RF	2,400	--	2,400				
	Total	535,300	25,700	561,000				
Virgin Islands NP, V.I.	ONPS	873,700	22,100	895,800	Park Ranger (Interp.), GS-4	1	297	11,770
					Mason Helper, Ungr.	1		
Subtotal, Southeast Parks	ONPS	26,166,000	1,201,900	27,367,900				
	RF	1,058,000	255,600	1,313,600				
	Total	27,224,000	1,457,500	28,681,500				
Assistant to the Regional Director--Florida-Caribbean	ONPS	238,300	3,500	241,800				
Southeast Archeological Center	ONPS	92,600	35,100	127,700	Archeologist, GS-11	1		
					Clerk-Typist, GS-4	1		
Total, Southeast Region	ONPS	26,496,900	1,240,500	27,737,400				
	RF	1,058,000	255,600	1,313,600				
	Total	27,554,900	1,496,100	29,051,000				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
MIDWEST REGION:								
Apostle Islands NL, Wis.	ONPS	181,400	18,500	199,900			20	2,539
Effigy Mounds NM, Iowa	ONPS	137,200	2,100	139,300			77	1,374
Fort Larned NHS, Kan.	ONPS	114,400	10,900	125,300			15	269
George Washington Carver NM, Mo.	ONPS	103,700	6,000	109,700			39	210
Wilson's Creek NB, Mo.	ONPS	85,800	1,200	87,000			32	1,728
Grand Portage NM, Minn.	ONPS	160,200	2,200	162,400			86	710
Herbert Hoover NHS, Iowa	ONPS	296,300	93,400	389,700			436	129
Homestead NM of America, Neb.	ONPS	128,500	1,800	130,300			21	181
Indiana Dunes NL, Ind.	ONPS	540,000	35,900	575,900			75	3,431
Isle Royale NP, Mich.	ONPS	867,200	16,400	883,600			16	539,375
	RF	700	-	700				
	Total	867,900	16,400	884,300				
Pictured Rocks NL, Mich.	ONPS	235,400	11,800	247,200			297	23,079
Jefferson National Expansion Memorial NHS, Mo.	ONPS	1,486,200	24,800	1,511,000			3,270	85

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Lincoln Boyhood NMem, Ind.	ONPS	197,600	3,000	200,600			173	119
George Rogers Clark NHP, Ind.	ONPS	145,500	5,800	151,300			83	24
Lincoln Home NHS, Ill.	ONPS	354,800	21,100	375,900			655	1
	RF	-	50,000	50,000				
	Total	354,800	71,100	425,900				
Ohio Group: Headquarters Office	ONPS	51,300	600	51,900				
Mound City Group NM, Ohio	ONPS	90,500	700	91,200			93	68
Perry's Victory and International Peace Mem., Ohio	ONPS	130,700	4,900	135,600			89	21
	RF	1,000	-	1,000				
	Total	131,700	4,900	136,600				
William Howard Taft NHS, Ohio	ONPS	68,000	8,500	76,500			6	1
Ozark National Scenic Riverways, Mo.	ONPS	1,232,200	90,300	1,322,500	Park Ranger, GS-5	2	2,443	58,013
					Administrative Clerk, GS-5	1		
					Supply Clerk, GS-5	1		
					Park Technician, GS-5	2		
					Park Technician, GS-4	1		
					Sewage Plant Operator, Ungr.	2		
					Maintenanceman, Ungr.	1		
	RF	40,500	-	40,500				
	Total	1,272,700	90,300	1,363,000				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Pipestone NM, Minn. ...	ONPS	197,700	2,600	200,300			136	282
Saint Croix NSR, Minn.-Wis.	ONPS	234,600	6,100	240,700			190	7,807
Scotts Bluff NM, Nebr.	ONPS	114,900	7,100	122,000			167	2,771
	RF	11,200	-	11,200				
	Total	126,100	7,100	133,200				
Agate Fossil Beds NM, Nebr.	ONPS	49,100	900	50,000	Park Ranger, GS-5	1	8	2,172
Sleeping Bear Dunes NL, Mich.	ONPS	178,500	16,300	194,800			-	3,547
Voyageurs NP, Minn. ...	ONPS	133,800	2,600	136,400			1	25,804
Subtotal, Parks	ONPS	7,515,500	395,500	7,911,000				
	RF	53,400	50,000	103,400				
	Total	7,568,900	445,500	8,014,400				
Midwest Archeological Center, Nebr.	ONPS	-	100,000	100,000	Supervisory Archeologist, GS-12	2		
					Archeologist, GS-11	1		
					Archeologist, GS-7	1		
					Secretary-Steno, GS-5	1		
Total, Midwest Region	ONPS	7,515,500	495,500	8,011,000				
	RF	53,400	50,000	103,400				
	Total	7,568,900	545,500	8,114,400				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
SOUTHWEST REGION:								
Amistad RA, Texas	ONPS	511,000	49,200	560,200	Boat Operator, Ungr.	1	1,347	57,292
					Clerk-Typist, GS-3	1		
					Motor Vehicle Operator, Ungr.	1		
Arkansas Post NMem., Ark.	ONPS	101,800	1,100	102,900			48	305
Bandelier NM, N. Mex. ..	ONPS	308,800	13,900	322,700	Maintenance Worker, Ungr.	1	170	29,661
	RF	19,700	--	19,700				
	Total	328,500	13,900	342,400				
Big Bend NP, Tex.	ONPS	1,101,700	9,300	1,111,000	Heavy Mobile Equipment Repairer, Ungr.	1	375	707,478
					Motor Vehicle Operator, Ungr.	1		
	RF	26,300	--	26,300				
	Total	1,128,000	9,300	1,137,300				
Buffalo NR, Ark.	ONPS	170,000	140,900	310,900			110	10,469
Capulin Mountain NM, ...	ONPS	119,500	2,300	121,800			48	720
N. Mex.	RF	13,000	--	13,000				
	Total	132,500	2,300	134,800				
Carlsbad Caverns NP, N. Mex.	ONPS	1,048,200	11,300	1,059,500	General Clerk (Typist), GS-3	1	850	46,436
					Physical Science Technician, GS-5	1		
	RF	185,900	72,300	258,200				
	Total	1,234,100	83,600	1,317,700				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Guadalupe Mountains NP, Tex.	ONPS	172,100	1,000	173,100	Engineer Equipment Operator, Ungr.	1	45	79,972
					Park Technician, GS-4	1		
	RF	--	10,300	10,300				
	Total	172,100	11,300	183,400				
Chalmette NHP, La.	ONPS	175,100	3,000	178,100			301	142
	RF	20,900	--	20,900				
	Total	196,000	3,000	199,000				
Chamizal NMem., Tex.	ONPS	632,900	4,900	637,800	Projectionist, Ungr.	1	216	55
Fort Davis NHS, Tex.	ONPS	231,300	2,000	233,300	Maintenance Worker, Ungr.	1	48	460
	RF	13,000	--	13,000				
	Total	244,300	2,000	246,300				
Fort Smith NHS, Ark.	ONPS	134,400	2,300	136,700			88	13
	RF	19,700	--	19,700				
	Total	154,100	2,300	156,400				
Fort Union NM, N. Mex.	ONPS	121,200	2,200	123,400	Maintenance Worker, Ungr.	1	11	721
	RF	13,000	--	13,000				
	Total	134,200	2,200	136,400				
Gila Cliff Dwellings NM, N. Mex.	ONPS	100,700	2,100	102,800	Park Technician, GS-5	1	42	533
	RF	13,300	--	13,300				
	Total	114,000	2,100	116,100				
Gran Quivira NM, N. Mex.	ONPS	111,500	2,400	113,900			40	611

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Hot Springs NP, Ark. ...	ONPS	656,400	11,200	667,600	Motor Vehicle Operator, Ungr.	1	2,678	3,119
	RF	13,300	--	13,300				
	Total	669,700	11,200	680,900				
Lake Meredith NRA, Tex.	ONPS	558,500	6,000	564,500	Supply Clerk, GS-2	1	1,938	45,964
Alibates Flint Quarries and Texas Panhandle Pueblo Culture NM, Tex. ...	ONPS	29,200	400	29,600			1	93
Lyndon B. Johnson NHS, Tex.	ONPS	321,500	279,200	600,700	Park Technician, GS-4	6	622	8
					Clerk-Typist, GS-3	1		
					Park Aid, GS-2	3		
					Maintenance Worker, Ungr.	3		
					Mechanic, Ungr.	1		
					Janitor, Ungr.	1		
					Ranch Foreman, Ungr.	1		
	RF	186,800	25,800	212,600				
	Total	508,300	305,000	813,300				
Navajo Lands Group:								
Headquarters Office ..	ONPS	233,200	2,700	235,900				
	RF	--	2,400	2,400				
	Total	233,200	5,100	238,300				
Aztec Ruins NM, ...	ONPS	83,600	1,800	85,400			59	27
N. Mex.	RF	18,800	--	18,800				
	Total	102,400	1,800	104,200				
Canyon de Chelly NM, Ariz.	ONPS	228,900	6,800	235,700	Park Technician, GS-4	1	690	83,840
Chaco Canyon NM, ...	ONPS	227,200	7,500	234,700			64	20,990
N. Mex.	RF	5,300	--	5,300				
	Total	232,500	7,500	240,000				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Navajo Lands Group: (cont.)								
El Morro NM, N. Mex.	ONPS	108,800	3,100	111,900			29	960
	RF	4,900	--	4,900				
	Total	113,700	3,100	116,800				
Hubbell Trading	ONPS	128,700	4,300	133,000	Park Aid, GS-2	1	76	155
Post NHS, Ariz.	RF	4,400	--	4,400				
	Total	133,100	4,300	137,400				
Navajo NM, Ariz.	ONPS	156,600	4,400	161,000			120	360
Sunset Crater NM, ...	ONPS	65,900	1,600	67,500			215	3,040
Ariz.	RF	10,900	--	10,900				
	Total	76,800	1,600	78,400				
Wupatki NM, Ariz.	ONPS	188,300	6,400	194,700			159	35,253
	RF	10,900	--	10,900				
	Total	199,200	6,400	205,600				
Padre Island NS, Tex. ..	ONPS	600,300	7,700	608,000	Park Technician, GS-4	1	968	132,212
	RF	--	50,000	50,000				
	Total	600,300	57,700	658,000				
Pea Ridge NMP, Ark.	ONPS	186,800	2,400	189,200			76	4,279
	RF	31,500	1,200	32,700	Park Technician, GS-4	1		
	Total	218,300	3,600	221,900				
Pecos NM, N. Mex.	ONPS	164,500	3,800	168,300			46	341
Platt NP, Okla.	ONPS	648,800	13,000	661,800	Park Aid (Typist), GS-2	1	4,015	912
	RF	17,700	4,900	22,600				
	Total	666,500	17,900	684,400				
Arbuckle NRA, Okla. ..	ONPS	94,000	1,100	95,100			563	5,640
	RF	20,200	--	20,200				
	Total	114,200	1,100	115,300				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
White Sands NM, N. Mex.	ONPS	265,000	2,500	267,500			679	140,326
	RF	32,700	10,900	43,600	Clerk Cashier, GS-4	1		
	Total	297,700	13,400	311,100				
Subtotal, Parks	ONPS	9,986,400	613,800	10,600,200				
	RF	682,200	177,800	860,000				
	Total	10,668,600	791,600	11,460,200				
Chaco Archeological Center	ONPS	233,500	3,100	236,600				
Southwest Regional Office	RF	13,200	--	13,200				
Total, Southwest Region	ONPS	10,219,900	616,900	10,836,800				
	RF	695,400	177,800	873,200				
	Total	10,915,300	794,700	11,710,000				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
WESTERN REGION:								
Cabrillo NM, Calif.	ONPS	265,800	4,400	270,200	Park Technician, GS-5	1	1,529	87
Channel Islands NM, Calif.	ONPS	236,400	3,100	239,500			59	18,167
Death Valley NM, Nev.-Calif.	ONPS	1,300,100	20,000	1,320,100	Motor Vehicle Operator, Ungr.	1	658	2,047,707
					Maintenance Worker, Ungr.	1		
	RF	86,100	--	86,100				
	Total	1,386,200	20,000	1,406,200				
Fort Point NHS, Calif.	ONPS	231,600	2,300	233,900			640	96
Golden Gate NRA, Calif.	ONPS	2,636,200	50,900	2,687,100			4,500	3,643
	RF	68,700	302,500	371,200				
	Total	2,704,900	353,400	3,058,300				
Grand Canyon NP	ONPS	2,408,400	450,600	2,859,000	Park Ranger (Inter.), GS-7	2	1,911	673,236
					Park Technician, GS-4	1		
					Janitor, Ungr.	1		
	RF	1,077,700	78,300	1,156,000	Park Technician, GS-5	1		
					Park Technician, GS-4	9		
	Total	3,486,100	528,900	4,015,000				
Grand Canyon NM, Calif.	ONPS	27,300	400	27,700			15	193,019
Marble Canyon NM,	ONPS	8,800	--	8,800			14	25,811
Hawaii Group: Headquarters Office (Hawaii State Director)	ONPS	205,300	3,100	208,400				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Hawaii Group (continued)								
City of Refuge NHP, Hawaii	ONPS	260,000	3,200	263,200	Maintenance Worker, Ungr.	1	536	182
Puukohola Heiau NHS, Hawaii	ONPS	95,500	800	96,300				46
Haleakala NP, Hawaii	ONPS	474,800	4,500	479,300	Laborer, Ungr.	1	407	21,190
	RF	9,800	--	9,800				
	Total	484,600	4,500	489,100				
Hawaii Volcanoes NP, Hawaii	ONPS	860,900	10,500	871,400	Laborer, Ungr	2	1,215	217,030
John Muir NHS, Calif.	ONPS	130,100	2,100	132,200			21	9
	RF	5,400	--	5,400				
	Total	135,500	2,100	137,600				
Joshua Tree NM, Calif.	ONPS	764,700	7,700	772,400			575	529,593
	RF	30,500	--	30,500				
	Total	795,200	7,700	802,900				
Lake Mead NRA, ... Nev.-Ariz.	ONPS	3,463,100	24,100	3,487,200			6,500	1,917,197
	RF	83,200	--	83,200				
	Total	3,546,300	24,100	3,570,400				
Lassen Volcanic NP, ... Calif.	ONPS	972,800	23,800	996,600	Mechanic, Ungr.	1	490	105,797
					Maintenanceman, Ungr.	1		
	RF	81,400	--	81,400				
	Total	1,054,200	23,800	1,078,000				

Park Areas and Other Entities, Program Items	Etc.	Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Lehman Caves NM, Nev....	ONPS	157,300	3,300	160,600	Park Guide, GS-4	1	36	640
	RF	1,800	--	1,800				
	Total	159,100	3,300	162,400				
Muir Woods NM, Calif....	ONPS	143,500	2,200	145,700			774	486
	RF	45,000	--	45,000				
	Total	188,500	2,200	190,700				
Petrified Forest NP, Calif....	ONPS	582,500	6,600	589,100	Motor Vehicle Operator, Ungr.	1	1,019	94,189
					Laborer, Ungr.	1		
	RF	64,100	--	64,100				
	Total	646,600	6,600	653,200				
Pinnacles NM, Calif.....	ONPS	330,500	5,600	336,100			153	14,178
	RF	25,100	--	25,100				
	Total	355,600	5,600	361,200				
Point Reyes NS, Calif...	ONPS	1,028,900	21,000	1,049,900	Engineering Equipment Operator, Ungr.	1	1,483	59,321
					B&U Maintenance Leader, Ungr.	1		
	RF	--	11,000	11,000				
	Total	1,028,900	32,000	1,060,900				
Redwood NP, Calif.....	ONPS	880,400	129,500	1,009,900	Laborer, Ungr.	2	270	27,807
Sequoia NP and Kings Canyon NP, Calif.	ONPS	3,169,700	50,600	3,220,300	Personnel Clerk, GS-4	1	1,712	846,045
					Park Technician, GS-4	1		
	RF	80,500	327,800	408,300	Park Technician, GS-7	2		
					Park Technician, GS-5	3		
	Total	3,250,200	378,400	3,628,600				
Devils Postpile NM, Calif.....	ONPS	33,700	600	34,300			84	798

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Southern Arizona Group:								
Headquarters Office	ONPS	603,500	5,100	608,600				
Casa Grande Ruins NM, Ariz.	ONPS	149,400	3,800	153,200			140	473
	RF	27,300	--	27,300				
	Total	176,700	3,800	180,500				
Chiricahua NM, Ariz...	ONPS	208,200	6,400	214,600			71	10,635
	RF	11,500	--	11,500				
	Total	219,700	6,400	226,100				
Coronado NMem, Ariz...	ONPS	106,400	2,800	109,200			43	2,834
Fort Bowie NHS, Ariz..	ONPS	53,300	1,300	54,600			3	970
Hohokam-Pima NM, Ariz.....	ONPS	75,500	1,300	76,800				
Montezuma Castle NM,..	ONPS	177,800	4,800	182,600	Park Technician, GS-4	1	365	785
Ariz.	RF	21,700	--	21,700				
	Total	199,500	4,800	204,300				
Organ Pipe Cactus NM,	ONPS	292,600	5,200	297,800			89	328,942
Ariz.	RF	15,100	--	15,100				
	Total	307,700	5,200	312,900				
Saguaro NM, Ariz.....	ONPS	432,200	12,800	445,000			401	77,958
	RF	14,000	--	14,000				
	Total	446,200	12,800	459,000				
Tonto NM, Ariz.....	ONPS	87,000	2,700	89,700	Administrative Clerk, GS-5	1	73	1,120
	RF	10,200	--	10,200				
	Total	97,200	2,700	99,900				
Tumacacori NM, Ariz...	ONPS	115,300	2,800	118,100			87	10
	RF	12,400	--	12,400				
	Total	127,700	2,800	130,500				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Southern Arizona Group: (cont.)								
Tuzigoot NM, Ariz....	ONPS	80,200	1,900	82,100			93	52
	RF	25,100	--	25,100				
	Total	105,300	1,900	107,200				
Walnut Canyon NM,.... Ariz.	ONPS	143,100	3,100	146,200			64	1,642
	RF	21,800	--	21,800				
	Total	164,900	3,100	168,000				
Whiskeytown NRA, ... Calif.	ONPS	834,300	19,500	853,800	Secretary, GS-4	1	1,013	42,134
	RF	25,200	--	25,200				
	Total	859,500	19,500	879,000				
Yosemite NP, Calif.....	ONPS	4,623,400	155,600	4,779,000	Mail and File Clerk, GS-5	1	2,637	759,038
					Power Plant Operator, Ungr.	3		
	RF	1,100,500	242,600	1,343,100	Accountant, GS-9	1		
	Total	5,723,900	398,200	6,122,100				
Subtotal, Parks	ONPS	28,650,500	1,060,000	29,710,500				
	RF	2,944,100	962,200	3,906,300				
	Total	31,594,600	2,022,200	33,616,800				
Arizona Archeological Center	ONPS	414,300	162,200	576,500	Archeologist, GS-13	1		
					Administrative Officer, GS-9	1		
					Archeologist, GS-9	1		
					Secretary, GS-6	1		
					Clerk-Typist, GS-4	2		
Total, Western Region..	ONPS	29,064,800	1,222,200	30,287,000				
	RF	2,944,100	962,200	3,906,300				
	Total	32,008,900	2,184,400	34,193,300				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
PACIFIC NORTHWEST REGION:								
Alaska Group:								
Headquarters Office (Alaska State Director)	ONPS	734,400	88,900	823,300	Clerk-Typist, GS-5	1		
Glacier Bay NM, Alaska	ONPS	428,500	5,100	433,600			39	2,805,072
Katmai NM, Alaska	ONPS	202,800	11,100	213,900			8	2,792,137
Mount McKinley NP, Alaska	ONPS	920,500	116,100	1,036,600	Clerk-Typist, GS-4	1	346	1,939,493
					Carpenter, Ungr.	1		
	RF	226,300	412,600	638,900				
	Total	1,146,800	528,700	1,675,500				
Sitka NHP, Alaska ..	ONPS	220,700	2,600	223,300			57	58
Coulee Dam NRA, Wash.	ONPS	736,500	5,700	742,200	Park Technician, GS-6	1	473	100,059
					Laborer, Ungr.	2		
	RF	10,300	--	10,300				
	Total	746,800	5,700	752,500				
Craters of the Moon NM, Idaho	ONPS	195,500	2,600	198,100	Maintenance Worker, Ungr.	1	186	53,545
	RF	5,000	--	5,000				
	Total	200,500	2,600	203,100				
Fort Clatsop NMem. Oreg.	ONPS	126,600	1,700	128,300			108	125

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Fort Vancouver NHS, Wash.	ONPS	149,600	64,300	213,900	Maintenance Worker, Ungr. Park Technician, GS-5	2 3	241	162
Klamath Falls Group: Headquarters Office	ONPS	243,700	3,400	247,100				
Crater Lake NP, Oreg.	ONPS	716,900	5,400	722,300	Equipment Operator, Ungr. Motor Vehicle Operator, Ungr.	1 1	520	160,290
	RF	38,300	8,200	46,500				
	Total	755,200	13,600	768,800				
Lava Beds NM, Calif.	ONPS	326,400	7,200	333,600	Clerk-Typist, GS-3 Motor Vehicle Operator, Ungr.	1 1	100	46,239
	RF	1,700	--	1,700				
	Total	328,100	7,200	335,300				
Oregon Caves NM, Oreg.	ONPS	99,800	1,200	101,000			158	480
Mount Rainier NP, Wash.	ONPS	2,174,400	69,700	2,244,100	Heavy Duty Mechanic, Ungr. Maintenanceman, Ungr.	1 1	1,965	235,193
	RF	67,500	10,900	78,400				
	Total	2,241,900	80,600	2,322,500				
Nez Perce NHP, Idaho	ONPS	197,700	1,900	199,600	Park Technician, GS-6 Maintenance Worker, Ungr.	1 1	235	1,837
North Cascades NP, Lake Chelan NRA, and Ross Lake NRA, Wash.	ONPS	1,132,900	17,600	1,150,500	Clerk-Typist, GS-4	3	937	503,120
	RF	5,900	12,000	17,900				
	Total	1,138,800	29,600	1,168,400				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Olympic NP, Wash.	ONPS	2,164,900	84,600	2,249,500	Clerk-Typist, GS-3	1	3,007	893,718
					Park Aid, GS-3	1		
	RF	27,500	--	27,500				
	Total	2,192,400	84,600	2,277,000				
San Juan Island NHP, Wash.	ONPS	107,700	15,700	123,400			69	1,725
Whitman Mission NHS, Wash.	ONPS	132,700	1,500	134,200			100	98
Subtotal Parks	ONPS	11,012,200	506,300	11,518,500				
	RF	382,500	443,700	826,200				
	Total	11,394,700	950,000	12,344,700				
University of Washington	ONPS	154,300	--	154,300				
Total, Pacific Northwest Region ..	ONPS	11,166,500	506,300	11,672,800				
	RF	382,500	443,700	826,200				
	Total	11,549,000	950,000	12,499,000				

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
SERVICEWIDE PROGRAMS:								
Concessions Management	ONPS	479,100	3,700	482,800				
Employees' Compensation Fund Payments	ONPS	577,600	81,700	659,300				
Executive Direction	ONPS	5,283,000	99,000	5,382,000				
Forest Fire Suppression and Rehabilitation of Burned Areas	ONPS	700,000	-	700,000				
General Services Administration Space Reimbursement	ONPS	-	5,112,000	5,112,000				
Interpretation of Bicentennial Parks ...	ONPS	409,000	3,000,000	3,409,000				
NPS Science Center	ONPS	786,400	6,800	793,200				
Park Support Services and Professional Services	ONPS	4,835,800	126,100	4,961,900				
Reservation System	RF	1,198,100	-332,700	865,400	Park Ranger, GS-11	1		
					Park Technician, GS-5	1		
					Reservation Clerk, GS-4	3		

Park Areas and Other Entities, Program Items, Etc.		Available 1974	Increase	Budget 1975	New Permanent Positions in the 1975 Budget: Position Title and Grade	Number	Visitor Projection Fiscal 1974 (in thousands)	Acreage
Ruins Stabilization Program	ONPS	-	800,000	800,000	Archeologist, GS-12	1		
					Archeologist, GS-9	1		
					Project Supervisor, GS-9	5		
					Project Supervisor, GS-7	3		
Volunteers-in-Parks Program	ONPS	100,000	-	100,000				
Total, Servicewide Programs	ONPS	13,170,900	9,229,300	22,400,200				
	RF	1,198,100	-332,700	865,400				
	Total	14,369,000	8,896,600	23,265,600				
GRAND TOTAL	ONPS	193,476,000	16,582,000	210,058,000				
	RF	8,400,000	2,208,000	10,608,000				
	Total	201,876,000	18,790,000	220,666,000				

2. Forest fire suppression and rehabilitation of burned areas: Fiscal year 1974, $700,000; fiscal year 1975, $700,000; no change.

Program of Work: These funds are used to meet forest fire suppression and emergency presuppression costs as they occur and for rehabilitation of burned areas. These funds may be required in addition to the regular fire protection service and other activities performed at the park areas for fire suppression and emergency presuppression. Suppression involves the actual fighting of forest fires while presuppression includes increasing protection forces during periods of critical fire danger in preparation for a fire emergency. After a fire emergency has passed, clearing, reseeding and other rehabilitation work is needed to reduce danger to human life and to conserve resources.

Examples of Recent Accomplishments: The Service is continuing its representation on the Departmental Fire Coordination Committee which coordinates with other agencies of the Department in fire suppression efforts. This committee has recently invited the Department of Agriculture (Forest Service) to participate, seeking a stronger, more economic and united Federal effort in the prevention and suppression of wildfires on public lands.

At the Boise Interagency Fire Center, Boise, Idaho, the coordinating center for the training of Service personnel in fire control, the Service established a fire coordinator to assist in the Boise Interagency Fire Center's function and act as liaison between the Center and the Service. The Center provides support in the fire suppression effort of the Service for those areas in the 11 Western States.

3. Executive direction: Fiscal year 1974, $5,283,000; fiscal year 1975, $5,382,000; increase, $99,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+99,000	--	$5,382,000		Annualization of classified pay increase.

Need for increase: An increase of $99,000 is requested to cover the additional costs in Fiscal 1975 of the classified pay raise authorized by Executive Order 11739, effective the first pay period on or after October 1, 1973. The part year costs in Fiscal 1974 are requested in a supplemental appropriation request for that year. This amount of $99,000 will annualize the cost in Fiscal 1975.

Program of Work: Executive direction and certain administrative functions of the Washington Office, National Capital Parks and eight regional offices are financed under this activity. The functions are general in nature and include: (1) formulation of policy; (2) prescribing systems and procedures; (3) legislative, budget, program planning and coordination, management analysis, financial management, personnel management, manpower development and property management functions; and (4) the overall executive direction and coordination of the various programs of the Service. The objective is to discharge the administrative and executive direction functions in the most effective, efficient, and economical manner, and to facilitate the execution of all of the Service's diversified programs to the maximum extent possible.

Examples of Recent Accomplishments: In order to bring action authority as close to the local level as possible and to implement the Administration's policy in standardizing regional office locations within the Federal Government, the National Park Service began implementing a major reorganization. As of January 1974, two new National Park Service regions were created, the North Atlantic and Rocky Mountain, with offices in Boston and Denver, respectively, and the boundary realignments of two other regions were made. These regional boundary changes will result in a more equitable workload with a better balance

in number of areas and number of employees per region providing the parks increased services from their regional offices. The changes will also afford the Service a better opportunity to achieve greater coordination of its programs with those of other Federal agencies and enable the Service to better serve the public.

Staffing the new regional offices will be facilitated by the recent Washington Office reorganization which released approximately 100 positions for use in the field. These additional positions were made available as a result of an in-depth evaluation of staffing and functions in the Washington Office.

A number of significant accomplishments were made in initiating new automated systems to facilitate administrative workload in a number of areas. They include: Installation of the first phase of the Programming and Financial Management System on a Servicewide basis for all finance offices under the former regional alignment. With the completion of this system, the Service has the capability to quickly and accurately report, on a Servicewide basis, information contained in 1,000,000 transactions through the first half of Fiscal 1974 distributed to 10,000 accounts for 298 areas in six regions, one service center, and one headquarters operation.

As of January 1974, the Service Incident Reporting System was operational for all of the park areas and the U.S. Park Police. In conjunction with the Incident Reporting System, a uniform set of reporting forms, codes and procedures has been developed to standardize incident and law enforcement activity reporting throughout the National Park Service. This system eliminates the manual preparation of reports required by the FBI and provides monthly reports detailing such data as time, location, extent and type of activity requiring the Ranger/Officer's attention. This system has proved so successful that the FBI is proposing its adoption by other interested organizations and the Office of Records and Protection Services of the Department of the Interior is considering installing it in other Departmental agencies and bureaus having law enforcement responsibilities.

Additionally, a Resource Inventory System designed to provide an inventory of information about all sites for which the National Park Service has responsibility is being implemented. Source data for all sites are being loaded into the system and will include such general information as address, location, and boundaries, as well as other characteristics unique to particular sites. The data in the system, in addition to providing information for operation and management purposes will be extremely useful in reviewing Environmental Impact Statements for projects which may affect areas of concern to the Service.

Personnel Summary

	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions.....	6,672	6,725	7,011
Full-time equivalent of other positions....	3,676	3,842	4,047
Average paid employment.....	9,661	9,814	10,032
Average GS grade.....	8.8	8.8	8.8
Average GS salary.....	$14,066	$14,737	$14,737
Average salary of ungraded positions.....	$10,462	$10,921	$11,312

NATIONAL PARK SERVICE
OPERATION OF THE NATIONAL PARK SYSTEM

Itemization of Estimate

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) Decrease (-)
Program and Financing:				
Total obligations	$162,699,942	$193,506,000	$210,088,000	$+16,582,000
Unobligated balance restored	-33,567	--	--	--
Transferred to other accounts	251,625	319,000	--	-319,000
Appropriation	162,918,000	193,825,000 1/	210,088,000 2/	+16,263,000
Obligations by objects:				
11 Personnel compensation	$107,792,113	$114,285,000	$117,508,000	$+3,223,000
12 Personnel benefits	10,479,112	11,338,000	11,625,000	+287,000
13 Benefits for former personnel	4,004	--	--	--
21 Travel and transportation of persons	3,514,690	4,972,000	5,915,000	+943,000
22 Transportation of things	2,753,890	4,090,000	4,732,000	+642,000
23 Rent, communications, and utilities	6,293,604	9,544,000	11,384,000	+1,840,000
24 Printing and reproduction	987,035	1,763,000	2,410,000	+647,000
25 Other services	12,023,741	19,065,000	24,758,000	+5,693,000
26 Supplies and materials	9,569,187	14,616,000	16,214,000	+1,598,000
31 Equipment	8,012,836	12,370,000	13,997,000	+1,627,000

Itemization of Estimate

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) Decrease (-)
Obligations by objects: cont.				
32 Lands and structures	1,047,098	1,463,000	1,545,000	+82,000
41 Grants, subsidies, and contributions	3,402	--	--	--
42 Insurance claims and indemnities	76,080	--	--	--
44 Refunds	143,150	--	--	--
Total obligations	162,699,942	193,506,000 1/	210,088,000 2/	+16,582,000

1/ Includes supplemental of $10,743,000 requested for pay raises and $30,000 in reimbursable programs.

2/ Includes $30,000 in reimbursable programs.

NATIONAL PARK SERVICE

Planning and Construction

Appropriation, 1974	$20,000,000	
Supplemental appropriation, 1974	12,000	
Unobligated balance from prior years	66,174,775	
Total available for obligation		$86,186,775
Decreases:		
Buildings, utilities, and other facilities	77,357,324	
Undistributed	29,451	77,386,775
Subtotal		8,800,000
Increases:		
Buildings, utilities, and other facilities		62,357,000
Park recreation and wilderness planning		600,000
Statutory or contractual aid for other activities		46,000
Total available for obligation		63,003,000
Less: Unobligated balance from F.Y. 1974		14,500,000
Budget Estimate 1975		57,303,000

NATIONAL PARK SERVICE

PLANNING AND CONSTRUCTION

Analysis by Activities

Activity	Amount Available 1974	Fiscal Year 1975			Total available 1975 compared to total available 1974
		Estimated Total Available	Unobligated Balance from 1974	Budget Estimate	
1. Buildings, utilities, and other facilities	$77,357,324	$62,357,000	$14,500,000	$47,857,000	$-15,000,324
2. Park, recreation, and wilderness planning ...	4,400,000	5,000,000	--	5,000,000	+600,000
3. Cooperative programs	3,927,500	3,927,500	--	3,927,500	--
4. Statutory or contractual aid for other activities	472,500	518,500	--	518,500	+46,000
Subtotal	86,157,324	71,803,000	14,500,000	57,303,000	-14,354,324
Undistributed	29,451	--	--	--	-29,451
Total	86,186,775	71,803,000	14,500,000	57,303,000	-14,383,775

1. Buildings, Utilities, and Other Facilities - $47,857,000

The amount of $47,857,000 is requested for the construction of buildings, utilities, and other facilities. The Fiscal 1975 program as proposed, will permit the National Park Service to complete construction of projects relating to the American Revolution Bicentennial Celebration and for the planning stage of projects scheduled for construction in Fiscal 1976 and 1977.

Development Program for the
American Revolution Bicentennial Celebration

The amount of $42,207,000 will provide for the continuation of the construction programs necessary to provide suitable facilities to enable visitors to appreciate and understand the celebration of 200 years of our Nation's History. Fiscal 1975 will be the last year of major construction funding for this historic event as 1976 will be the focal year of the Bicentennial Celebration. Since a great influx of visitors is anticipated beginning in 1976 and through the entire Bicentennial era, construction projects must be completed prior to the start of the celebration so that the visitor's park experience is not impaired by ongoing construction projects.

There are 22 areas and portions of the National Capital Parks located in and around the Nation's Capital which are identified with the Bicentennial Celebration. They are:

Adams NHS	Massachusetts
Colonial NHP	Virginia
Cowpens NB	South Carolina
Federal Hall NMem	New York
Fort McHenry NM and HS	Maryland
Fort Moultrie NHS--(Fort Sumter NM)	South Carolina
Fort Necessity NB	Pennsylvania
Fort Stanwix NM	New York
George Rogers Clark NHP	Indiana
George Washington Birthplace NM	Virginia
Guilford Courthouse NMP	North Carolina
Hamilton Grange NMem	New York
Hopewell Village NHS	Pennsylvania
Independence NHP (Includes Gloria Dei Church NHS)	Pennsylvania
Kings Mountain NMP	South Carolina
Minute Man NHP	Massachusetts
Moores Creek NMP	North Carolina
Morristown NHP	New Jersey
Salem Maritime NHS	Massachusetts
Saratoga NHP	New York
Statue of Liberty NM	New York-New Jersey
Thaddeus Kosciuszko NMem	Pennsylvania
National Capital Parks	District of Columbia-Maryland - Virginia

General Support

Funds are required annually for major alteration and improvement projects, for construction and/or replacement of exhibits and other interpretive facilities in existing park buildings, and for facilities to serve concessioner developments.

This program consists primarily of numerous small projects for which specific project identification is not now known. The requirements for the types of projects financed under this program arise throughout the year, many of which are of an emergent nature, and are accomplished according to priority. A portion of the funds requested here will provide advance planning for which the construction stage is expected to be included in the budget for Fiscal 1976 and 1977. Provisions are made in this request for the following lump sum items:

(a) Major alterations and improvements - $1,850,000

(b) Exhibits and other interpretive facilities - $800,000
This includes an amount for construction or replacement of museum exhibits and audiovisual facilities and programs in existing buildings and along waysides.

(c) Facilities to serve concessioner developments - $300,000

(d) Advance Planning - $2,700,000

2. Park, Recreation, and Wilderness Planning: Fiscal year 1974, $4,400,000; fiscal year 1975, $5,000,000; increase, $600,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+600,000	+8	$2,214,700		To accelerate master planning program.

Cost Factors Involved in Increase

(1) Eight permanent positions at an average annual rate of $11,000, $88,000; supplies, materials and equipment, $48,000; travel and transportation of things, $32,000; and other services, including contract work, $432,000.

Need for increase: An amount of $600,000 is requested under this activity, as follows:

Master Planning

An amount of $600,000 is required to accelerate the program of work for Master Planning. A general slowdown in the rate of completion and approval of master plans has occurred as a result of changes in procedures and emphasis in response to the requirements of the National Environmental Policy Act. Master plans and their accompanying impact statements must be based on a thorough understanding of the resources and information about the region surrounding areas of the National Park System. This important resource information has not consistently been available to park planners and managers. In many instances the quality of data available in certain crucial categories such as cultural, ecological, and socio-economic data has been poor to non-existent and usually not organized in a usable form. This weakness in planning and management shows up most clearly in environmental impact statement review. This type of deficiency results in costly delays, restudies, and additional data gathering after the planning effort has proceeded to an advanced stage.

Accordingly, an increase of $600,000 is required to accelerate the Master Planning function to permit the Service to catch up with the delays it is experiencing as a part of the NEPA requirements and to provide the means to

prepare Resource Basic Inventories and conduct special planning studies in support of management decisions and programs. Emphasis will be to apply solid knowledge and understanding to the master planning alternatives at the very earliest stages and thus accelerate the completion of plans and improve their quality.

Program of Work:

National Park System Plan--Natural History

The estimate provides $166,600 for continuing this program in Fiscal 1975 at the same level as in Fiscal 1974.

The present environmental concerns further accent the importance of the National Park System Plan. The Plan plays a very special part in setting aside outstanding examples of our natural heritage for public inspiration and enjoyment. Further, it will have a great scientific value since it identifies and describes many relatively undisturbed ecosystems.

In 1970, a special study was prepared to develop the most meaningful and helpful analysis of the present National Park System and to identify gaps and inadequacies. The resulting reports, upon the recommendations of the Advisory Board on National Parks, Historic Sites, Buildings and Monuments, were approved by the Secretary as valuable guidelines for further evolution of the National Park System Plan and a useful framework within which to present plans and priorities to the Office of Management and Budget and the Committees of the Congress for expansion of the National Park System.

The Natural History portion of the National Park System Plan is organized on the basis of natural history themes and natural regions which provide a logical and scientific approach for identifying the kinds of areas which best represent our natural heritage, and hence, the areas which should be evaluated for possible inclusion in the System. The Plan provides a framework within which the National Park System may be effectively organized to protect and exhibit superb elements of the Nation's natural heritage--the most significant examples of our great national landscapes, riverscapes and shores and undersea environments; the processes which form them; the life communities that grow and dwell therein.

The recent study analyzes some 33 natural history themes as they occur in one or more natural regions comprising our Nation. It is important that studies of these regions and the themes represented in them advance as rapidly as possible so that recommendations for rounding out the National Park System can be made while opportunities still exist to preserve them.

Natural History Theme Studies accomplished or undertaken in the last seven fiscal years will make important contributions to this goal. Nine regional studies, involving an average of 10 themes each, are programmed to start in Fiscal 1975. They reflect priorities which recognize endangered types of areas, the inroads of other resource-based uses, the continuing spread of man's work, and in some cases the question of timeliness in relation to other broad ongoing governmental studies.

Examples of Recent Accomplishments: During Fiscal 1973 and the first portion of Fiscal 1974, five new natural region theme studies were started while one natural region theme study was completed during the same period. Theme studies take approximately two years to complete and are comprised of two main parts, the ecological and geological inventories. The new theme studies now underway include the Columbia Plateau natural region, Appalachian Plateau natural

region, Piedmont natural region, Puerto Rico natural region. Additionally, the ecological inventory for Arctic Lowland natural region was undertaken. In the same time period, the South Pacific Border natural region theme study was completed as was the ecological inventory of the Great Plains natural region.

Landmarks

The estimate provides $444,400 for natural landmark evaluation studies in 1975 at the same program level as in Fiscal 1974.

The Natural Landmarks Program is directly effective in the identification and registration of natural landmarks that encourage the preservation of nationally significant natural areas regardless of ownership. The objectives of the program are to: Encourage the preservation of sites illustrating the geological and ecological character of the United States; strengthen cultural appreciation of natural history; enhance the educational and scientific value of sites thus preserved; and to foster a greater concern in the conservation of the Nation's natural heritage.

Examples of Recent Accomplishments: During Fiscal 1973, onsite natural landmark evaluations were started on 306 sites. Previous landmark evaluation studies resulted in 64 natural landmarks being added to the Registry in Fiscal 1973. An additional 44 landmarks, presented to the Advisory Board in the first part of Fiscal 1974, are now awaiting approval by the Secretary of the Interior for inclusion in the Registry.

New Area Studies

The estimate provides $557,900 for new area studies in 1975 at the same program level as in Fiscal 1974.

The Service investigates, evaluates, then makes and supports recommendations relating to proposals to add new areas to the National Park System. These proposals arise through suggestions from citizens, citizen organizations, and citizen advisory groups; through systematic natural and historical theme studies conducted by the National Park Service; and, as a result of studies required by Acts of Congress (as the Wild and Scenic Rivers Act and the National Trails System Act). Much of the program activity, moreover, arises in response to inquiries and requests from individual Members of Congress and Congressional Committees concerning proposed and pending legislation. The normal sequence of events progresses from the suggestion to (1) a reconnaissance study and determination of national significance; (2) a study suggesting various management and boundary alternatives; (3) the preparation of a master plan for management and development which is fully supported by maps, exhibits, and quantitative data concerning costs for acquisition, development and operation of the proposed area needed to support legislative action. Approximately 200 potential new areas are under various stages of consideration and review. This program provides data needed for legislative consideration of proposals involving natural and historical resources which in the absence of adequate recognition and protection may be lost forever.

Examples of Recent Accomplishments: During Fiscal 1973, the National Park Service completed six new area studies. Three additional studies have been completed thus far in Fiscal 1974. Some 11 sets of legislative support data based on these, earlier, or still underway reports have been compiled or updated in Fiscal 1973 and seven in the first part of Fiscal 1974. These and previous studies have resulted in the establishment of 12 new areas of the National Park System during the 1973 fiscal year.

Land Use Studies

The estimate provides $488,200 in Fiscal 1975 for land use studies, the same as is available in Fiscal 1974. Changing land values throughout the country accentuate the need for accurate and up-to-date cost estimates on new areas and boundary adjustment proposals to be submitted to the Congress. Under this work element, the development of land cost procedures and the actual land cost estimates is prepared. Additionally, work leading to the solution of problems relating to both normal and adverse use made of park lands, and in recommending changes in existing park boundaries,is carried out.

Examples of Recent Accomplishments: Several land use studies have recently been completed or are underway which make available the necessary land use data from which recommendations concerning lands for proposed new areas or boundary adjustments are made.

Two significant studies accomplished were concerning key areas in southwestern Florida and southeastern Texas.

These studies resulted in legislation being introduced in the Congress to authorize the Big Cypress National Freshwater Reserve in the State of Florida and the Big Thicket National Park in the State of Texas.

Establishment of the Big Cypress Reserve will protect the outstanding wildlife in that area and preserve a critical freshwater supply for Everglades National Park. The endangered domestic water supplies for Florida's southwest coastal cities would be similarly insured as would the source of water helpful to maintain the delicate fresh water, salt water balance of the nutrient laden estuaries of the Gulf which are of particular importance to the shrimp fisheries.

Big Thicket National Park, when established, will preserve for present and future generations an area in the State of Texas possessing outstanding botanical, zoological, geological, archeological and ecological values as well as recreational and natural values including free flowing streams and habitat for many diverse species of wildlife.

Other land use studies completed include studies for the proposed 12 areas in Alaska, Clara Barton House National Historic Site, Maryland; Florida Frontier Historic Riverway, Florida; John Day Fossil Beds National Monument, Oregon; Lindenwald National Historic Site, New York; Springfield Armory National Historic Site, Massachusetts and proposed Tuskegee Institute National Historical Park, Alabama. Additionally, land use studies were completed for the propsed enlargement of Grand Canyon National Park, Arizona; Independence National Historical Park, Pennsylvania; Indiana Dunes National Lakeshore, Indiana.

Water Resource Studies

The estimate provides a program of $715,600 in Fiscal 1975, for the water resource studies program and work relating to acquisition of water rights.

Water resource studies include the direction and coordination of the Service-wide water resources program. Water resource activities are directed towards matters dealing with water, including wastewater, its occurrence, quantity, quality, uses, disposal, reuse, conservation, and its overall protection. Planning, development and management of park areas are frequently dependent upon water.

Water resource activities involve a program of water resource studies for all park areas. These hydrologic studies inventory known water sources--streams,

lakes, springs and wells--their present use and development, their physical characteristics and their potentials. The studies locate and evaluate these sources, generally through cooperative studies with other Federal agencies, principally the U.S. Geological Survey, or by contract with State agencies, universities or private consultants. A limited number of studies are carried out by Service personnel. The reports describe the geology of the area, discuss the ground and surface water potentials, the minimum yield of streams, springs and wells, water quality, and the effects development of the source may have on the environment.

Paralleling the importance of the knowledge of the physical characteristics of the water resource, is a knowledge of the ownership and legal limits to which this resource may be utilized. To this end, activities relating to acquisition of water rights are directed to investigate ownership, rights and use of water for all park areas to facilitate the protection and, where appropriate, the perfection of water rights. Prelitigation studies of water resources and related water rights are made as necessary for the Solicitor's Office and/or Justice Department. Water resource data are collected to satisfy requirements of court decisions.

The water resource activity concerns itself with the examination of the water resources potential and water rights, as necessary, on lands proposed for acquisition. Lands may be inholdings, newly authorized areas or proposed areas. The examinations aid appraisers in determining the monetary value of lands to be acquired, the necessity of acquiring the lands in fee simple or the advisability of quit-claiming or excepting rights to water in the deeds. As necessary, with assistance from land acquisition personnel, the acquisition of water rights and rights-of-way on private lands in and out of park areas are consummated.

Examples of Recent Accomplishments: In Fiscal 1973, work was performed in 51 parks which included 13 comprehensive geohydrological investigations of ground and surface water; the drilling and testing of 20 wells, 12 of which were successfully converted to production wells; the installation of about 17 water and tidal measuring gages; continuation of measurement of streamflows and ground-water levels at 16 park areas; the preparation and filing of 28 water right applications; and 114 chemical analyses of water quality.

The Fiscal 1974 work is underway on 27 geohydrological investigations of ground and surface water; the continuation of gaging programs begun in prior years, such as at Cape Cod National Seashore and Everglades National Park; continuation of research and inventory of water rights and resources; the drilling and testing of one to three wells in each of 13 parks; and the recording of claims for about 11 parks.

Wilderness Act Implementation

The estimate provides funds in the amount of $412,600 for Wilderness Areas Studies, to continue this program in Fiscal 1975 at the same operating level as in Fiscal 1974.

The Wilderness Act of September 3, 1964 (Public Law 88-577), requires the Secretary of the Interior to review every roadless area of five thousand contiguous acres or more in the national parks, monuments and other units of the National Park System which were in existence on the date of the Act. Sixty-seven areas in the National Park System fall within the purview of the Act. The review is to be followed by recommendations to the President as to the suitability

or unsuitability of each such area for preservation as wilderness. The President must advise the Congress within a ten-year period on his recommendation.

A prerequisite to the actual wilderness studies is a review of the legislative history and the legislation itself that applies to the park, the status of inholdings, water rights, special use permits, reservations in deeds and other encumbrances, all of which is basic information which could influence decisions on suitability of park lands for wilderness designation. Frequently, where encumbrances exist (such as life estates or public land withdrawals), negotiations with private parties and Government agencies are necessary to determine the possibility of removing encumbrances on park lands otherwise suitable for wilderness recommendation.

In addition to the field studies, the Wilderness Act requires that public hearings be held to review the proposals developed by the Service. This requires the preparation and distribution of drawings and texts, making arrangements for hearings, and replying to a large volume of correspondence. After the hearings, comments and suggestions received must be assembled, summarized and evaluated as a part of the report. This report constitutes recommendations of the Service to the Secretary of the Interior and includes a draft of suggested legislation as well as text and drawings justifying and describing the proposal. The Secretary makes his evaluation and develops the recommendations on the proposals as to the suitability or unsuitability for wilderness designation to the President, who advises the Congress of his recommendations.

The wilderness plans are produced as detailed action plans upon the foundation of the Master Plans developed for each park. They begin to emerge while the Master Plans are underway, and both types of plans become interwoven. Solution of Master Plan problems helps to solidify wilderness proposals.

Following is the progress and anticipated progress in submitting final recommendations to the Congress:

Submitted through Fiscal 1973	33
Estimated for Fiscal 1974	22
Estimated for Fiscal 1975	8
Estimated for future years	2
Total	65

The 33 recommendations submitted through Fiscal 1973 included recommendations for the former Arches and Capitol Reef National Monuments. Subsequent legislation abolished these national monuments and established the Arches and Capitol Reef National Parks. As a result new wilderness recommendations will be required for the national parks and will be submitted during Fiscal 1975.

Examples of Recent Accomplishments: The 1974 fiscal year began with earlier accomplishments carried over from previous fiscal years that include the designation of wilderness within Craters of the Moon National Monument, Idaho, and Petrified Forest National Park, Arizona; Lassen Volcanic National Park and Lava Beds National Monument, California.

During this same period, recommendations for the following 34 areas were sent to Congress and await Congressional action:

Arches National Monument, Utah (now Arches National Park)
Badlands National Monument, South Dakota
Bandelier National Monument, New Mexico
Big Bend National Park, Texas
Black Canyon of the Gunnison National Monument, Colorado
Bryce Canyon National Park, Utah
Capitol Reef National Monument, Utah (now Capitol Reef National Park)
Carlsbad Caverns National Park, New Mexico
Cedar Breaks National Monument, Utah
Chaco Canyon National Monument, New Mexico
Chiricahua National Monument, Arizona
Colorado National Monument, Colorado
Cumberland Gap National Historical Park, Virginia, Tennessee, Kentucky
Grand Canyon Complex, Arizona
Grand Teton National Park, Wyoming
Great Sand Dunes National Monument, Colorado
Guadalupe National Park, Texas
Haleakala National Park, Hawaii
Isle Royale National Park, Michigan
Joshua Tree National Monument, California
Kings Canyon National Park, California
Mesa Verde National Park, Colorado
North Cascades Complex, Washington
Padre Island National Seashore, Texas
Pinnacles National Monument, California
Point Reyes National Seashore, California
Saguaro National Monument, Arizona
Sequoia National Park, California
Shenandoah National Park, Virginia
Theodore Roosevelt National Memorial Park, North Dakota
White Sands National Monument, New Mexico
Wupatki National Monument, Arizona
Yellowstone National Park, Idaho, Wyoming, Montana
Yosemite National Park, California

Also, during the same period, three additional recommendations were formulated and sent to the Department. These three recommendations are for the following areas:

Crater Lake National Park, Oregon
Glacier Bay National Monument, Alaska
Katmai National Monument, Alaska

Thirteen additional recommendations are expected to be forwarded to the Department in Fiscal 1974.

Thus far, three public hearings have been held concerning preliminary wilderness proposals which are still under review in the Service.

Great Smoky Mountains National Park, North Carolina and Tennessee
Glacier National Park, Montana
Olympic National Park, Washington

Master Planning

The budget provides $2,214,700 for continuing master planning of existing areas in Fiscal 1975, an increase of $600,000 over the Fiscal 1974 level of $1,614,700.

The Master Planning Program deals with basic land utilization considerations such as access and transportation, physical facilities development, classification of lands, environmental assessment park uses, park capacity, and park administration. These interrelated aspects of park management are examined in the parks by a professional team along with the park Superintendent and staff. The intense, comprehensive study necessary for master planning is intended to bring into focus all the various facets of management and use so that concepts can be developed which deal effectively with long-range deep-seated problems. A master plan report is prepared as a result of this study which recommends the management actions required to deal with these problems. A continuing effort in Fiscal 1975 will be to evaluate planning and park management procedures and practices and make modifications and improvements therein as necessary to insure that master planning procedures and standards fully support the purposes of the Environmental Policy Act in applying criteria at the very earliest planning stages.

The general public is given an opportunity to review the contents of a preliminary working draft master plan and the plans are presented at public meetings for the purpose of obtaining the views and comments of those attending the meetings. Written statements are also received for the record. Following evaluation, appropriate changes are incorporated into the report before it becomes an approved master plan. A concurrent procedure in assuring full public disclosure and review is the preparation and availability of an environmental impact statement.

The most pervasive continuing problem facing almost all units of the National Park System is overcrowding resulting from increased visitation, changes in visitor use patterns, visitor attitudes, and outdated facilities coupled with changing land use patterns in the regions surrounding the parks. Rising visitation has created tremendous traffic problems in many of the parks. Feasible solutions to those problems including revamped circulation and development patterns stressing public transportation are being examined by the master plan teams on a continuing basis to insure that solutions are in accord with the needs of visitors and the resources.

Continuing efforts in master planning are made to coordinate planning in any multijurisdictional situations which occur. This includes joint planning of Federal and State areas; provision of technical, planning, zoning, and other assistance to local jurisdictions to stimulate interest in protecting the environment from the effects of uncontrolled development; and cooperation with other agencies in joint regional planning efforts either by direct participation or through provision of data.

To keep current with changing conditions, it is necessary to review and update park master plans periodically. New land planning techniques must be evaluated and applied, where feasible, to current land planning problems. These include computer mapping, satellite mapping, computer classification systems and application of methods of determining carrying capacity.

Examples of Recent Accomplishments: During Fiscal 1973 and the first half of Fiscal 1974, 22 final master plans were completed and 10 preliminary working draft master plans were prepared for public meetings. Three special studies were completed. In addition, there are 132 active master plan studies underway and 7 of these are new starts.

3. Cooperative Programs: Fiscal year 1974, $3,927,500; fiscal year 1975, $3,927,500; no change.

Cooperative Programs

This activity finances assistance provided other Federal agencies, the States, and private institutions in planning, development and operation of historical, recreational and other values on lands involved.

Program of Work:

Federal Agency Assistance

An amount of $197,000 is requested in Fiscal 1975 to carry out a program of Federal Agency Assistance. To help meet the park and recreation needs of the Nation, the experience of the Service in planning, development, and managing parks and recreation areas will be made available upon request to other Federal agencies. Most assistance is furnished on a reimbursable basis and is in the form of recreational development planning to the Bureau of Reclamation for authorized reservoir projects.

Participation will continue in the ongoing Interagency Federal-State water and related land resources studies (Connecticut River Supplemental, Long Island Sound, Pacific Northwest Comprehensive Coordinated Joint Plan, Platte River Basin in Nebraska, Southeast New England, and Hawaii). The Service would participate as needed in any new water resource studies authorized for the Water Resources Council. The Service's primary responsibility in these studies is the assessment of historical, archeological, natural, and aesthetic values to insure consideration of such significant values in plan formulation. The Service will review and comment upon Bureau of Reclamation and Corps of Engineers reports, Soil Conservation District Watershed Plans, Comprehensive River Basin Reports, Federal Power Commission applications, applications to the Corps of Engineers for dredge and fill permits, and public notices of proposed highway construction. These and other similar reports and applications are reviewed for effects upon proposed or existing units of the National Park System; Registry of National Landmarks; and environmental, aesthetic and cultural values, including those protected by the Historic Preservation Act of 1966.

In conjunction with the review of other agency actions cited above (i.e., permit applications and highway projects), where an associated environmental statement has been prepared, the Service jointly accomplishes its review and comments on the environmental statement. In some instances, only an environmental statement is referred for review and comment which constitutes a separate case and is handled in the same manner as others under Federal Agency Assistance.

Examples of Recent Accomplishments: In cooperation with the Bureau of Mines, the Service provided continuing assistance for site development, grading and planting plans for Lackawana County Park, Pennsylvania, (formerly strip mined area); with the Bureau of Reclamation, developed recreation and site plans for Garrison Diversionary Project, North Dakota; assisted the Bureau of Reclamation in developing recreational facilities plans, for Heron Reservoir, New Mexico and projected State Park in Oklahoma; and, with the Bureau of Reclamation, is participating in Task Force for planning responsibility of the Pineville Reservoir, Oregon.

Environmental Impact Statements

In Fiscal 1975, $2,426,000 is requested to carry out work in compliance with the National Environmental Policy Act of 1969 (NEPA). The Service will continue to bear a very significant work effort in the preparation of environmental statements upon its legislative and administrative actions, and review environmental statements prepared by other agencies as requested. In Fiscal 1974, 38 positions have been devoted full time to the preparation of environmental statements and the review of those referred by other agencies. The work of these positions has been augmented by the part-time involvement of many other positions whose duties may relate but are of other primary import such as park managers, resource professionals and clerical staffs.

Experience has shown that development of an adequate environmental statement requires an extensive volume of qualified basic information along with sufficient professional capability in appropriate and diverse disciplines to interpret the information and prepare the statement. These same requisites are in dire need for the quality improvements necessary in associated planning documents.

In addition to the work of preparing its own environmental statements, the Service assists other bureaus, usually within the Department of the Interior, in the preparation of their statements. This type of effort is in a technical nature somewhat like the recreational development planning which the Service provides through its Federal Agency Assistance; however, as the Service professional staff who would assist other bureaus are most directly associated with the preparation of Service statements, such assistance is handled as a part of this environmental statement work.

Examples of Recent Accomplishments: During Fiscal 1973 and the first portion of Fiscal 1974, 25 final environmental impact statements were completed while some 50 draft statements were prepared on National Park Service legislative and administrative actions. Additionally, for the same time period, the Service reviewed 1,998 statements prepared by other agencies.

The Service's reallocation of manpower from the Washington Office to the Regional, Service Center, and Park Offices is doing much to improve the Service's implementation of NEPA and making the best use of personnel assigned to environmental statement work.

Indian Assistance Program

An amount of $330,500 is required to continue the Service's Indian Assistance program. The National Park Service provides technical assistance to Indian tribes throughout the Nation for developing the recreational and cultural resources of their lands. This program is carried out under a formal cooperative agreement between the National Park Service and the Bureau of Indian Affairs and is aimed at stimulating and expanding the Indian economy. Assistance is provided upon request and in conformance with the tribes' determinations on how they want to manage their lands and properties.

Types of assistance provided varies depending upon the particular needs of an individual tribe. Generally, however, the Service provides assistance in the following areas: Conceptual and general recreation development planning; advisory services on development and operation of recreation areas and facilities;

technical assistance on ruins stabilization and museum management, archeological and historical surveys and personnel training for parks and recreation management such as that available through the Campground Management Institute held at Albright Training Center.

Examples of Recent Accomplishments: In cooperation with Federal agencies such as the Bureau of Indian Affairs, Bureau of Reclamation, United States Forest Service, Bureau of Land Management, Bureau of Sport Fisheries and Wildlife, Economic Development Association and individual States, the following assistance was provided: campground plans prepared for Red Cliff Band, Chippewas, near Apostle Islands; site plans for Sisseton-Wahpiton Ceremonial Park; layout plans for Santee-Sioux Indiana Campground; recreation and tourism analysis for Fort Belknap, Montana; schematic plans for recreation facilities for Blackfeet Indians, Montana; development plans and specifications for Tesuque Reservation, New Mexico; plans for Tribal Building, on Jamez Reservation for Kaibab-Paiute; assisted in recreationwide reservation plans for Mescalero-Apache; recreational development plan for Blackfoot Reservation, Idaho; and provided Environmental Education Workshop for Quinalt Indian leaders for use in Indian summer camp program.

The Western Region has provided planning assistance to 18 Indian tribes for primitive and standard campgrounds and related facilities and has printed an assistance booklet for Indian tribes, "So You Want to Build a Campground."

Training assistance to individual tribes such as the Utes in Colorado as well as curriculum development and personnel have been provided for the Indian Campground Training Program at Albright.

Nez Perce Indians were provided assistance for appearances at Seattle Folk Festival; Creek, Choctaw, and other Indian tribes from Oklahoma have been added to the seasonal staff at Ocmulgee National Monument to provide interpretive programs in weaving, dance, and pottery for visitors.

State and Private Assistance

For Fiscal 1975, $287,000 is requested to continue the State and Private Assistance program. This program provides for participation in the Park Practice publications, the Intergovernmental Personnel Act, the Recreation Demonstration Area compliance, as well as other liaison and cooperative programs which range from acting as contracting agent with national organizations to review and coordinate cultural programs in park areas, to the production of technical publications on such subjects as park planning, interpretation, environmental education, maintenance operations, and training for State and local park personnel. A flow of relevant conservation and recreational material is provided NPS regional, and State personnel. Close working relationships with the States and private organizations through personal contacts and in providing information and reviewing plans assure recognition of Federal programs and a proper concern for significant natural and cultural values as well as utlization of recreational resources.

Examples of Recent Accomplishments: In Alaska, the Service provided liaison with native villages and regional groups on D-2 land withdrawals. Interpretive planning assistance was made available for urban-State parks in Portland, Oregon, and Seattle, Washington.

Assistance has been furnished the Tennessee Tourism Council by the Tennessee State Coordinator to achieve better visitor dispersal patterns; and to Coos County, Oregon, and private groups for recreation area planning.

Regional folk festivals were held this year in cooperation with local communities in Seattle, Washington, and Chamizal at El Paso, Texas, as well as the National Folk Festival at Wolf Trap Farm Park. A training seminar in conjunction with George Washington University and the National Folk Festival Association on "Folklore in America" was available for NPS and other interested professionals. Craft Fairs were held at Peters Valley in Delaware Water Gap National Recreation Area, General Grant National Memorial, and at Sagamore Hill National Historic Site. Craft and related research facilities were made available to Federal Hall National Memorial and Apostle Islands National Lakeshore.

In Fiscal 1973, the National Park Service Training Institute for Park and Recreation Management conducted eight courses for NPS employees, 14 States, two Indian tribes and other Federal agencies. Tennessee Valley Authority and the Service co-hosted a successful seminar on "Trail Bikes and Land Use Planning" for some 50 participants from Federal agencies, universities and industry representatives.

Alaska Task Force

In Fiscal 1975, $687,000 will be required to continue work performed by the Alaska Task Force. The National Park Service, through the Alaska Task Force, has been conducting comprehensive studies of areas in Alaska to be withdrawn under the Alaska Native Claims Settlement Act of December 18, 1971. Conceptual master plans, legislative support data and environmental impact statements covering the areas which the Secretary recommends as proposed additions to the National Park System were submitted to the Congress on December 18, 1973.

To efficiently and economically carry out the planning functions, the Alaska Task Force will remain in Anchorage to serve the continuing planning needs of the National Park Service in connection with the various legislative proposals being submitted to the Congress by the Secretary. As Congress considers the various proposals, work will continue toward refining and improving the planning proposals and the accompanying legislative support data. The planning effort must be further supported by resource-based studies in the fields of biology, geology, archeology, history, and socio-economics in order to more fully identify the significant natural and cultural values in Alaska and how the planning proposals can best relate to them. Also, the prehistoric and historic resources of Alaska must be inventoried and studied further to achieve a better understanding of their significance and the type of protection that will be required.

As refinement of the planning work progresses, there is a continual need for exchange of ideas and inputs with the concerned increased public and other non-governmental interests. Further planning considerations will also involve increasingly close coordination with the Village and Regional Native Corporations, State and other Federal agencies. Particularly close planning coordination is required with other Interior agencies and with the Joint Federal-State Land Use Planning Commission.

Examples of Recent Accomplishments: Field study teams, augmented by detailed personnel, conducted extensive studies and in July 1972, submitted to the Secretary, a 157 page publication identifying the areas recommended for inclusion in the System. Further studies continued in August and September and revised

recommendations were submitted to the Secretary to assist him in making the final withdrawal on September 18, 1972. During the period from October 1972 through April 1973, the field study data was evaluated and preliminary Environmental Impact Statements, Master Plans, and legislative support data, including land cost estimates, were prepared for the 12 areas recommended for inclusion in the System. Mineral resource and other data, which would also become part of the legislative support data, was accumulated. A photographic library, now containing approximately 25,000 color transparencies and 2,600 black and white photographs, was established--a motion picture filming contract for approximately 130,000 feet of film, documenting the studies, was let and filming began in July 1973. Research contracts covering two areas proposed for addition to the System, were negotiated.

In July 1973, a multi-agency unit, made up of National Park Service, Bureau of Sport Fisheries and Wildlife and Bureau of Outdoor Recreation personnel, was established in Washington to coordinate the production of the Master Plans, the draft Environmental Impact Statements, and the legislative support data for all three agencies, which the Secretary submitted to Congress on December 18, 1973. Permanent personnel from the Alaska Task Force as well as detailed personnel from the Washington Office and field areas are currently involved in the project. In October, additional personnel from the Bureau of Land Management and the Forest Service participated in the preparation of proposals involving their respective agencies. Final Environmental Impact Statements, following public review and comment, will be published by the end of Fiscal 1974.

4. Statutory or Contractual Aid for Other Activities

Analysis by Subactivities,

Subactivity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 compared with 1974
(a) Roosevelt Campobello International Park Commission	$150,000	$167,500	$196,300	$+28,800
(b) Hampton National Historic Site	35,000	35,000	43,300	+8,300
(c) Fort Scott Historic Area	218,000	--	--	--
(d) Ice Age National Scientific Reserve .	--	270,000	278,900	+8,900
Total	403,000	472,500	518,500	+46,000

4. Statutory or contractual aid for other activities: Fiscal year 1974, $472,500; fiscal year 1975, $518,500; increase, $46,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+28,800	--	$196,300	--	Additional funds to meet the U.S. share of operating Roosevelt Campobello International Park Commission.
(2) +8,300	--	43,300	--	Additional funds to provide assistance to the Society for the Preservation of Maryland Antiquities for preserving, protecting and maintaining Hampton NHS.
(4) +8,900	--	278,900	--	Additional funds to provide the Service's share of operating and development funds for Ice Age National Scientific Reserve.
$+46,000				

Cost Factors Involved in Increases

(1) Grants, subsidies and contributions, $28,800.

(2) Grants, subsidies and contributions, $8,300.

(4) Grants, subsidies and contributions, $8,900

Program of Work: This program provides financial or other assistance in the planning, development or operation of natural, historical or recreation areas not operated by the National Park Service. This assistance is provided to the following sites as authorized by law or pursuant to agreements between the National Park Service and other Federal agencies, States or private institutions.

(a) Roosevelt Campobello International Park Commission: Fiscal year 1974, $167,500; fiscal year 1975, $196,300; increase, $28,800.

Need for increase and Program of Work: An increase of $28,800 is needed to provide part of the increased costs for year-round administrative, maintenance, custodial and related work at the park. The Roosevelt Campobello International Park authorized by Public Law 88-363, approved July 7, 1964, commemorates the childhood home of Franklin D. Roosevelt on Campobello Island, New Brunswick, Canada. This International Park, administered by a joint United States-Canadian Commission, has a small staff of permanent employees responsible for providing

the necessary services at the park. When the park is open to the public, the staff is supplemented by temporary guards, guides and laborers as needed. The amount requested is the United States' share (50 percent) of cost of operation and development for Fiscal 1975.

(b) Hampton National Historic Site: Fiscal year 1974, $35,000; fiscal year 1975, $43,300; increase, $8,300.

Need for increase and Program of Work: An increase of $8,300 is requested to provide additional assistance to the Society for the Preservation of Maryland Antiquities for preserving, protecting and maintaining Hampton National Historic Site, located just outside Baltimore, Maryland. Designated a national historic site in 1948, Hampton National Historic Site is one of the great post-revolution mansions of America. It was built between 1783 and 1790 and exemplifies the late-Georgian style of architecture. The amount of $43,300 for Fiscal 1975 is required to assist the Society in necessary maintenance of the mansion, outbuildings and grounds.

(c) Fort Scott Historic Area: Fiscal year 1974, $-0-; fiscal year 1975, $-0-.

Under authority of Public Law 89-155, approved August 31, 1965, the National Park Service acting for the Secretary of the Interior is authorized to promote the preservation of Fort Scott as a national historic area by providing technical and financial assistance. By cooperative agreement between the National Park Service and the City of Fort Scott, the Service also engages in historical research and planning necessary to the preservation of the site. The City of Fort Scott is responsible for operating and maintaining the area and the properties associated with it as a historic site. Since authorizing legislation, Public Law 93-128, October 18, 1973, was signed subsequent to the formulation of the budget no funds are being requested for technical or financial assistance of Fort Scott Historic Area.

(d) Ice Age National Scientific Reserve: Fiscal year 1974, $270,000; fiscal year 1975, $278,900; increase, $8,900.

Need for increase and Program of Work: An additional amount of $8,900 will be required to carry out provisions of the cooperative agreement between the National Park Service and the Wisconsin Department of Natural Resources for acquisition, development, operations and financing of the Ice Age National Scientific Reserve. Authority for this cooperative agreement is contained in Public Laws 88-655 and 91-483 directing the Secretary of the Interior to cooperate with the State of Wisconsin in designating and administering the scientific reserve. The Service is responsible for preparing a detailed master plan and an interpretive prospectus in addition to other information necessary to carry out interpretive programs. Further, the Service and the Wisconsin Department of Natural Resources will assist the Ice Age Park and Trail Foundation in a study of the proposed Ice Age Trail in Wisconsin. Accordingly, an amount of $278,900 will be required to carry out this program in Fiscal 1975.

Personnel Summary

	1973 Actual	1974 Estimate	1975 Estimate
NATIONAL PARK SERVICE			
DIRECT:			
Total number of permanent positions	453	453	461
Full-time equivalent of other positions .	113	113	113
Average Paid employment	519	515	515
Average GS grade	8.8	8.8	8.8
Average GS salary	$14,066	$14,737	$14,737
Average salary of ungraded positions	$10,462	$10,921	$11,312
REIMBURSABLE			
Total number of permanent positions	57	59	59
Full-time equivalent of other positions .	175	175	175
Average paid employment	230	232	232
Average GS grade	8.8	8.8	8.8
Average GS salary	$14,066	$14,737	$14,737
Average salary of ungraded positions	$10,462	$10,921	$11,312
ALLOCATION ACCOUNTS			
Total number of permanent positions	29	--	--
Full-time equivalent of other positions .	5	--	--
Average paid employment	34	--	--
Average GS grade	9.1	--	--
Average GS salary	$12,302	--	--

NATIONAL PARK SERVICE
PLANNING AND CONSTRUCTION

Itemization of Estimate

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) Decrease (-)
Program and Financing:				
Total obligations	$46,172,218	$71,686,775	$71,803,000	$+116,225
Unobligated balance available, start of year	-58,200,993	-66,174,775	-14,500,000	+51,674,775
Unobligated balance available, end of year	66,174,775	14,500,000	--	-14,500,000
Appropriation	54,146,000	20,012,000 1/	57,303,000	+37,291,000
Obligations by objects:				
11 Personnel compensation	$7,405,960	$7,318,000	$7,478,000	$+160,000
12 Personnel benefits	723,035	725,000	738,000	+13,000
13 Benefits for former personnel	21,325	--	--	--
21 Travel and transportation of persons	1,331,415	1,303,000	1,383,000	+80,000
22 Transportation of things	387,816	383,000	405,000	+22,000
23 Rent, communications, and utilities	612,215	583,000	610,000	+27,000
24 Printing and reproduction	195,136	191,000	202,000	+11,000
25 Other services	10,227,768	18,787,775	8,646,000	-10,141,775
26 Supplies and materials	2,584,461	2,561,000	2,585,000	+24,000

Itemization of Estimate

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) Decrease (-)
Obligations by objects: (cont.)				
31 Equipment	2,078,778	1,955,000	1,985,000	+30,000
32 Lands and structures	20,588,646	37,880,000	47,771,000	+9,891,000
42 Insurance claims and indemnities	8,898	--	--	--
44 Refunds	6,765	--	--	--
Total obligations	46,172,218	71,686,775	71,803,000	+116,225

1/ Includes $12,000 provided in the Supplemental Approprition Act, 1974.

NATIONAL PARK SERVICE

Road Construction (Liquidation of Contract Authority)

Unexpended, start of 1974	$3,020,158	
Appropriation, 1974	35,000,000	$35,000,000
Total available fiscal year 1974	38,020,158	
Less Road Construction (Estimated expenditures F.Y. 1974)	-32,740,000	
Unexpended balance start of 1975	5,280,158	
Budget estimate, fiscal year 1975	23,000,000	23,000,000
Total available fiscal year 1975	28,280,158	
Less Road Construction (Estimated expenditures F.Y. 1975)	-23,000,000	
Unexpended balance, start of 1976	5,280,158	
Increase in cash requested		-12,000,000

Analysis of Cash by Fiscal Year

	Actual 1973	Estimate 1974	Estimate 1975	Increases or Decreases
Total expenditures, Road Construction	$16,352,355	$32,740,000	$23,000,000	$-9,740,000
Unexpended balance, start of year	-13,956,513	-3,020,158	-5,280,158	-2,260,000
Unexpended balance, end of year	3,020,158	5,280,158	5,280,158	--
Appropriation to Liquidate Contract Authority	5,416,000	35,000,000	23,000,000	-12,000,000

CONTRACT AUTHORITY AND LIQUIDATION PROGRAM

	Contract Authority Available	Obligations	Unliquidated Obligations, Prior Years	Total Obligations	Unliquidated Obligations Carried Forward	Expenditures
			FISCAL YEAR 1973			
Roads, trails and parkways	$90,448,618	$16,472,837	$14,966,638	$31,439,475	$15,087,120 1/	$16,352,355
			FISCAL YEAR 1974			
Roads, trails and parkways	264,297,680	51,183,158	15,087,120	66,270,278	33,530,278	32,740,000
			FISCAL YEAR 1975			
Roads, trails and parkways	303,504,349	33,000,000	33,530,278	66,530,278	43,530,278	23,000,000

1/ Available cash for liquidation was $3,020,158

Road Construction
(Liquidation of Contract Authority)

Contract authority: Contract authority for the Service's roads, trails and parkways construction program is provided in the Federal-Aid Highway Act. The current authorities are provided in Sections 104(a)(7) and 104(a)(8) of the Federal-Aid Highway Act of 1973 (Public Law 93-87) approved August 13, 1973. This bill provides contract authority for the Service's roads, trails and parkways programs in the amount of $195 million in Fiscal 1974 and $105 million for Fiscal 1975 and Fiscal 1976 respectively. At the beginning of Fiscal 1975, based on current estimates, an amount of $303.5 million contract authority will be available.

Need for funds (liquidating cash): The amount of $23 million is requested in this appropriation to make payments as requirements accrue for the liquidation of obligations incurred under the contract authority for construction and reconstruction of roads, trails, and parkways. This amount is based on the level of the obligational program in Fiscal 1975 and prior years for which contractor earnings will accrue.

Obligational program: The Fiscal 1975 obligational program of $33 million is requested. This level program will complete the road construction portion of the Bicentennial development program in time for the focal year of the celebration and provide for the most critical projects in other park areas. This includes projects to prevent further deterioration of existing roads, trails, parkways and related facilities, and to provide for some development in recently authorized park areas.

The Fiscal 1975 program consists of:

	Amount
Advance planning	$3,100,000
Project planning and construction in Bicentennial areas	12,000,000
Project planning and construction in non-Bicentennial areas	16,000,000
Roads and trails improvements betterments, resurfacing and reconstruction	1,700,000
Facilities to serve concessioner developments	200,000
Total obligational program	$33,000,000

Personnel Summary

	1973 Actual	1974 Estimate	1975 Estimate
NATIONAL PARK SERVICE			
Total number of permanent positions	114	114	114
Full-time equivalent of other positions .	106	106	106
Average paid employment	208	207	207
Average GS grade	8.8	8.8	8.8
Average GS salary	$14,066	$14,737	$14,737
Average salary of ungraded positions	$10,462	$10,921	$11,312
ALLOCATION ACCOUNTS			
Total number of permanent positions	49	38	38
Full-time equivalent of other positions .	8	8	8
Average paid employment	57	46	46
Average GS grade	8.2	8.2	8.2
Average GS salary	$13,918	$14,763	$15,214

NATIONAL PARK SERVICE
ROAD CONSTRUCTION (LIQUIDATION OF CONTRACT AUTHORITY)

Itemization of Estimate

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) Decrease (-)
Obligations by objects:				
11 Personnel compensation	$3,321,955	$3,359,000	$3,475,000	$+116,000
12 Personnel benefits	290,285	294,000	304,000	+10,000
21 Travel and transportation of persons	331,725	612,000	462,000	-150,000
22 Transportation of things	73,558	125,000	95,000	-30,000
23 Rent, communications, and utilities	143,786	368,000	218,000	-150,000
24 Printing and reproduction	9,368	36,000	28,000	-8,000
25 Other services	1,818,060	3,341,000	2,341,000	-1,000,000
26 Supplies and materials	394,815	812,000	512,000	-300,000
31 Equipment	65,810	176,000	101,000	-75,000
32 Lands and structures	10,023,475	42,060,158	25,464,000	-16,596,158
Total obligations	16,472,837	51,183,158	33,000,000	-18,183,158

NATIONAL PARK SERVICE
ROAD CONSTRUCTION (LIQUIDATION OF CONTRACT AUTHORITY)

Program and Financing

	Actual 1973	Available 1974	Estimate 1975	Increase (+) Decrease (-)
Total obligations	$16,472,837	$51,183,158	$33,000,000	$-18,183,158
Unobligated balance available, start of year:				
Appropriation	--	--	--	--
Contract authority	-90,448,618	-73,975,781	-213,114,522	-139,138,741
Unobligated balance available, end of year:				
Appropriation	--	--	--	--
Contract authority	73,975,781	213,114,522	270,504,349	+57,389,827
Contract authority lapsing	--	4,678,101	14,610,173	+9,932,072
Unfunded balance, start of year	91,458,742	86,042,742	241,364,641	+155,321,899
Unfunded balance, end of year	-86,042,742	-241,364,641	-308,754,468	-67,389,827
Unfunded balance lapsing (Contract authority)	--	-4,678,101	-14,610,173	-9,932,072
Appropriation to liquidate contract authority	5,416,000	35,000,000	23,000,000	-12,000,000

NATIONAL PARK SERVICE

Preservation of Historic Properties

Appropriation, 1974		$15,559,000
Proposed supplemental for pay costs		283,000
Unobligated balance from prior years		4,775,556
Total available for obligation		20,617,556
Decreases:		
Grants-in-Aid	$4,213,964	
Maintenance of the national register	236,386	
Historic Sites Survey	62,814	
Archeological investigations and salvage	262,392	
Subtotal		4,775,556
Increases:		
Special Bicentennial grants-in-aid to States	$4,000,000	
Grants-in-Aid	4,495,000	
Annualization of Classified Pay Increase	38,000	
Subtotal		8,533,000
Total available for obligation		24,375,000
Less: Unobligated balance from F.Y. 1974		--
Budget Estimate, 1975		24,375,000

Preservation of Historic Properties

Analysis by Activities

Activity	Amount Available 1974	Fiscal Year 1975 Estimated Total Available	Fiscal Year 1975 Unobligated Balance from 1974	Fiscal Year 1975 Budget Estimate	Total available 1975 compared to total available 1974
1. Historic preservation and special studies	$20,617,556	$24,375,000	--	$24,375,000	$3,757,444

1. Historic preservation and special studies

Analysis by Subactivities

Subactivity	Amount Available 1974	Fiscal Year 1975 Estimated Total Available	Fiscal Year 1975 Unobligated Balance from 1974	Fiscal Year 1975 Budget Estimate	Total available 1975 compared to total available 1974
(a) Grants-in-Aid	$15,718,964	$16,000,000	--	$16,000,000	$+281,036
(b) Special Bicentennial grants-in-aid	--	4,000,000	--	4,000,000	+4,000,000
(c) Maintenance of the national register	978,386	751,000	--	751,000	-227,386
(d) Advisory council on historic preservation support	535,000	543,000	--	543,000	+8,000
(e) Historic sites survey	636,814	578,000	--	578,000	-58,814
(f) Historic American buildings survey	442,000	448,000	--	448,000	+6,000
(g) Historic American engineering record	233,000	236,000	--	236,000	+3,000
(h) Archeological investigations and salvage	2,073,392	1,819,000	--	1,819,000	-254,392
Total	20,617,556	24,375,000	--	24,375,000	+3,757,444

(a) Grants-in-aid: Fiscal year 1974, $11,505,000; fiscal year 1975, $16,000,000; increase, $4,495,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Position	Total Program	Total Positions	Explanation
(1) $+4,495,000	+8	$16,000,000	20	Grants-in-aid to states and National Trust for Historic Preservation.

Cost Factors Involved in Increase

(1) Grants-in-aid to States, $4,495,000.

Need for increase: Under authority of Public Law 93-54 signed July 1, 1973, amending the National Historic Preservation Act of 1966, (80 Stat. 915), the Fiscal 1975 grants-in-aid authorization is $20 million, the highest to date. The Fiscal 1975 estimated need of the States and National Trust is for $70 million in Federal aid for 1,400 survey, planning and preservation projects. Since the establishment of the program, Federal funding has not kept pace with the amounts required to meet requests submitted by the States. The requested amount of $4,495,000 will permit approximately 180 additional projects to be undertaken. The proposed increase is required to enhance our ability to maintain State and National Trust programs supporting State and private historic preservation efforts that derive incentive from Federal support. Without this proposed increase the Federal effort continues to fall further behind in providing assistance to the States with demonstrated financial capability. At stake is the continuing loss of unique, irreplaceable, historic structures that embody our natural heritage.

An additional eight positions are needed to adequately administer the rapidly expanding grant program. Program growth is attributable to (1) increased awareness of historic preservation as a national concern and an aspect of sound land use; (2) related grantee progress in accomplishing historic preservation surveys, plans and programs, requiring increased staff evaluation and advisory activity to insure the professionalism and administrative integrity of assisted undertakings; and (3) expansion of the program mission and funding level in terms of administration of special Bicentennial grants described in subactivity (b).

Program of Work: The National Historic Preservation Act of 1966 (80 Stat. 915) as amended, authorizes a program of matching grants-in-aid. The program record for Fiscal 1973-75 follows:

	1973	1974	1975
Matching Requests	$32,765,000	$66,713,000	$70,000,000 (est.)
Authorization	15,000,000	15,600,000	20,000,000
Appropriation/Budget Request	7,505,000	11,505,000	20,000,000

(Authorization for Fiscal 1975 includes amounts for Special Bicentennial grants-in-aid which is explained in subactivity (b) below.)

Grants are awarded to the States and the National Trust for Historic Preservation to assist public and private historic preservation efforts. Grants to the States support:

- surveys to identify historic properties for classification and possible nomination to the National Register;
- development of State historic preservation plans and annual programs;
- projects to acquire and develop historic properties listed in the National Register.

Grants to the National Trust support:

- technical assistance and educational programs;
- maintenance, administration and development of Trust-owned properties;
- new acquisitions.

To accomplish this work, the grants staff evaluates historic preservation plans and annual programs of the States; advises the States in preservation planning and objectives; processes for applications assistance; reviews project work plans, specifications and reports; visits assisted sites; processes payment requests; maintains records of grant assistance; insures that grants are administered in compliance with Federal requirements; conducts audits of grantee accounts through the Office of Survey and Review; and drafts the Secretary of the Interior's apportionment of grant appropriations.

Program Directions and Goals

In conformance with the New Federalism, a major program objective is to simplify grants administration and increase grantee autonomy in determining use of grant funds. The program is viewed as a partnership in which both the National Park Service and the grantees assume distinct and increasing responsibilities commensurate with the continuing substantial growth in public awareness of the importance and goals of historic preservation in America. In this partnership the National Park Service promulgates professional standards and a general approach to preservation, and the grantees take broad initiative in administering individually assisted projects and extending support throughout the private sector.

The partnership concept is important to another program goal, which is to make the National Park Service grant office a central source of authoritative information on ways and means of preservation based on reported experiences of grantees in developing programs and solving technical and other problems. In this way the program will make a continually greater impact on improving professionalism in preservation across the country.

Similarly, the partnership contributes to increased historic preservation planning as a means by which the needs and problems of preservation as a major environmental issue, and as an aspect of land-use planning are identified for Federal and local attention.

Examples of Recent Accomplishments: On November 22, 1973, the Secretary of the Interior apportioned $10,453,863 to the 50 States, the District of Columbia, Guam, and the National Trust for Historic Preservation. The combined matching capability of the grantees, their total request for Federal funding; was $103,355,216 for 1,448 projects. This is the first year that all 50 States have been included in the apportionment and the first year of participation by the Territory of Guam.

For the first time, each grantee's apportionment has been awarded as an Annual Program Grant to carry on approved Fiscal 1974 work programs. Until now grants have been awarded on a project-by-project basis. In conformance with the New Federalism, the Annual Program Grant broadens grantee prerogatives in determining the best use of available funds. This will facilitate historic preservation planning as a form of land use planning, and will further the effort to change the nature of historic preservation activities from ad hoc reaction to crises into an efficiently organized program.

For the first time, a program of audits of grantees has been activated in cooperation with the Department's Office of Survey and Review. Audits to date of nearly half the grantees have resulted in significantly improved management and accountability of funds, as well as in grantee awareness of program policies, procedures, and professional preservation standards.

As of November 23, 1973, 690 grants totalling $17,143,743 have been made under the Historic Preservation Act of 1966. Based on reports submitted by grantees at the completion of projects, the program maintains a steadily expanding reference source on professional preservation problems, solutions and treatments to contribute to the development of preservation expertise nationwide.

(b) Special Bicentennial Grants-in-aid: Fiscal year 1974, $-0-; fiscal year 1975, $4,000,000; increase, $4,000,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+4,000,000	--	$4,000,000		To implement a Special Bicentennial grants-in-aid program.

Cost Factors Involved in Increase

(1) Grants-in-aid to States, $4,000,000.

Need for increase: An amount of $4,000,000 is requested for implementing a Special Bicentennial grants-in-aid program to assist cities having historic preservation projects that will contribute to the special meaning of the Bicentennial celebration. Special Bicentennial funding would provide a unique opportunity for the Federal Government to stimulate State and local Bicentennial efforts and to foster effective preparation for the rapidly approaching Bicentennial era. In Fiscal 1974, 15 States submitted requests for Special Bicentennial grants totalling nearly $37 million for over 150 proposed projects. An increasing need for Federal support can be anticipated through 1976. The increase proposed would permit special emphasis to be given to preserving historic structures representative of the Revolutionary era.

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Program of Work: A special grants-in-aid program at the $ 4 million level is proposed to assist cities having historic preservation projects that will contribute to the special meaning of the Bicentennial celebration. Special Bicentennial grants will be administered by the National Park Service in accordance with standard grant program policies and procedures. That is, States will be asked to submit Special Bicentennial grant programs which will undergo a preliminary review to assure compliance with basic program policies and procedures. The Special Bicentennial grant programs will be evaluated according to the criteria described below giving equal weight to the five required elements to determine eligibility of the States. Special Bicentennial funds will be apportioned to eligible States on a pro-rata basis according to the matching capability indicated for the special grant programs.

Grants will be awarded to eligible requesting States on the basis of the following criteria:

Special American Revolution Bicentennial matching funds for historic preservation will be apportioned to States with cities:

1. that played primary roles in the movement that lead to American independence;

2. that were central to the conduct of the Revolution;

3. that are the location of outstanding properties illustrating significant themes in United States history;

4. that can expect to host large numbers of visitors during the Bicentennial era; and

5. where viable projects with high potential for illustrating the American heritage have been developed.

(c) Maintenance of the National Register: Fiscal year 1974, $742,000; fiscal year 1975, $751,000; increase, $9,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+9,000	--	$751,000		Annualization of classified pay increase.

Need for increase: An increase of $9,000 is requested to cover the additional costs in Fiscal 1975 of the classified pay raise authorized by Executive Order 11739, effective the first pay period on or after October 1, 1973. The part year costs in Fiscal 1974 are requested in a supplemental appropriation request for that year. This amount of $9,000 will annualize the cost in Fiscal 1975.

Program of Work: Expansion of the National Register of Historic Places, maintained under authority of the Historic Sites Act of 1935, is authorized by the National Historic Preservation Act of 1966. Rapidly accelerated expansion is directed by Executive Order 11593.

As the official protective inventory of our Nation's tangible historic and cultural heritage, the Register contains properties of local, State and national significance. Every State has entries. The rate of expansion is rapidly increasing as the States increase their abilities to identify and nominate properties to the National Register. The number of State nominations reviewed, evaluated, and approved by the National Register staff now averages 244 per month--an increase of 112 percent over one year ago.

Executive Order 11593, signed by the President on May 13, 1971, directs Federal agencies to nominate to the National Register all properties which appear to qualify. The Secretary of the Interior is directed to provide criteria and procedures for the guidance of other agencies to coordinate and encourage the cooperation of the State Historic Preservation Officers, and to render professional advice and assistance. This requires approximately 500 consultations per year. Federal agencies plan to nominate properties at the average rate of 333 per month during Fiscal 1975--an increase of 36 percent above the number of nominations now being processed.

Additions to the National Register are published monthly in the Federal Register and a cumulative listing appears therein annually. A descriptive reference volume, "The National Register of Historic Places," is published biennially. Work must be completed for the 1976 Bicentennial edition, projected to include as many as 11,000 entries during Fiscal 1975.

Examples of Recent Accomplishments:

Registration. The National Register has expanded from 102 State nominations and 964 National Historic Landmarks and National Park Service areas as of 1969, to a cumulative total of 7,903 as of November 1973, of which 2,188 were 1973 nominations (28 percent). State and Federal nominations accounted for 90 percent and National Landmarks for 10 percent. Federal agencies have submitted 100 properties for review by the National Register in 1973.

Under the requirements of Executive Order 11593, Federal agencies have inventoried and nominated an increasing number of properties to the National Register. In addition, they have come to the National Register for guidance in recognizing historic properties which might be affected by their projects. The National Register has made 28 recommendations to the Secretary of the Interior for determinations of eligibility pursuant to Section 2(b). These determinations are being published in the "Federal Register." Determinations have been made, for example, on properties owned by the Department of Transportation, the Department of Housing and Urban Development, the General Services Administration, the United States Postal Service, and the Department of Defense.

The National Register initiated a statistical analysis of properties listed in the National Register. The results of this study will be used to inform and guide the States in reviewing the scope of their programs and will aid the National Register in planning a more effective response to State needs.

National Register Publications. The second edition of "The National Register of Historic Places" (hardbound publication), which contains descriptions of over 3,000 properties, was published during Fiscal 1973. Descriptions of all entries since July 1, 1971--about 3,500--have been prepared for a supplementary edition to be published in the spring of 1974. Plans for the 1976 Bicentennial edition of the National Register were initiated at the end of Fiscal 1973 and preparation of material for that publication has begun.

Monthly additions to the National Register are printed in the "Federal Register" the first Tuesday of each month, and a revised cumulative listing will be published in February 1974. The "Federal Register" now includes listings of historic properties which are either eligible for nomination to the National Register or nominated but not yet listed. Such properties are entitled to protection under Executive Order 11593.

State Plans. A total of 50 States, the District of Columbia, American Samoa and Guam have had their historic preservation plans approved. This is an increase of three over Fiscal 1973.

The Annual Preservation Program component of each State Historic Preservation Plan is submitted by June 30 for review and approval by the National Park Service. Annual Preservation Programs submitted by the States for Fiscal 1974 are greatly improved in depth and quality from previous years' submissions. These programs reflect great overall progress in both survey and project work and in increased consideration of various matters affecting preservation throughout the country. More attention is being devoted to incorporating preservation planning into overall State and National planning processes.

(d) Advisory Council on Historic Preservation Support: Fiscal year 1974, $535,000; fiscal year 1975, $543,000; increase, $8,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+8,000	--	$543,000		Annualization of classified pay increase.

Need for increase: An increase of $8,000 is requested to cover the additional costs in Fiscal 1975 of the classified pay raise authorized by Executive Order 11739, effective the first pay period on or after October 1, 1973. The part year costs in Fiscal 1974 are requested in a supplemental appropriation request for that year. This amount of $8,000 will annualize the cost in Fiscal 1975.

Program of Work: The Advisory Council on Historic Preservation was established by Title II of the National Historic Preservation Act of 1966 (80 Stat. 915), as amended. The Advisory Council is an advisory and coordinating body whose members are: the Secretaries of the Interior, Commerce, Treasury, Housing and Urban Development, Transportation, and Agriculture, the Attorney General, the Administrator of the General Services Administration, the Secretary of the Smithsonian Institution, the Chairman of the National Trust for Historic Preservation, and 10 citizen members appointed by the President. The Department of the Interior is charged by law to provide financial and administrative services to the Council.

The Advisory Council is charged with the following responsibilities: (1) commenting on Federal, federally assisted or licensed undertakings having an effect on any district, site, building, structure, or object listed on the National Register of Historic Places; (2) advising the President and the Congress on historic preservation matters; (3) submitting studies and special reports on historic preservation matters to the President and the Congress, including proposing such legislative enactments and other actions necessary to carry out recommendations; (4) recommending measures to coordinate activities of Federal, State, and local agencies and private institutions and individuals relating to historic preservation (5) recommending studies in such areas as the adequacy of legislation and administrative statutes pertaining to the historic preservation

activities of State and local governments, and the effects of tax policies at all levels of Government on historic preservation; (6) advising as to guidelines for assistance of State and local governments relating to historic preservation legislation; (7) encouraging training and education in the field of historic preservation; and (8) coordinating United States membership in the International Centre for the Study and Restoration of Cultural Property (the Rome Centre).

Under the National Environmental Policy Act, and in accordance with the Guidelines of the Council on Environmental Quality, Federal agencies must consult with the Advisory Council as an agency having expertise in historic preservation, and the Advisory Council is obligated to comment upon draft Environmental Impact Statements.

Under Executive Order 11593 "Protection and Enhancement of the Cultural Environment," the Advisory Council is required to (1) consult with agencies of the Executive Branch of the Government to assist these agencies in instituting procedures to assure that plans and programs contribute to the preservation and enhancement of non-federally owned historic properties; (2) comment upon Federal Agency proposals to transfer, sell, demolish or substantially alter Federal property either listed or qualified to be listed on the National Register; and (3) review and comment upon Federal Agency procedures to provide for the maintenance through preservation, rehabilitation or restoration of federally owned and registered sites.

Examples of Recent Accomplishments: The Advisory Council continued to exercise its mandate to protect historic and cultural resources in 399 cases during the first five months of Fiscal 1974. It closed 116 cases during this period. The caseload during the period forecasts that Fiscal 1974 will show a 100 percent increase over the caseload of Fiscal 1973, just as Fiscal 1973 represented a 100 percent increase in caseload over 1972. The cases under review during the first five months of Fiscal 1974 exceed the total number of cases handled during the first six years (1967-1972) of the Council's existence. The Council's protective activities are growing as the result of responsive sensitivity on the part of Federal agencies; citizen awareness and participation; additional responsibilities under Executive Order 11593; and the establishment of a regional office in Denver.

The Council commented on 332 Environmental Impact Statements during Fiscal 1973 and received 161 statements for comment during the first five months of Fiscal 1974.

The Council's International Centre Committee sponsored two important projects during Fiscal 1973. The first was a conference on "Principles and Practices of Preservation and Conservation" held at Colonial Williamsburg and Philadelphia, September 11-16, 1972. Attending the conference were 161 restorers and conservators from 31 States and 6 foreign countries. The second was a Traveling Summer School for Restorationists. Conducted from July 5 to August 4, 1972, in France, Belgium, Holland, and England, the school gave 17 American professionals the opportunity to become acquainted with European restoration methods and techniques.

Additionally, the Council produced a number of publications during Fiscal 1973-1974. In October 1972, the Council staff began publication of a newsletter. Distributed to Council members and selected preservation officials, including State Historic Preservation Officers, Federal Representatives for Historic Preservation, AIA State Preservation Coordinators, and National Trust Advisors, the newsletter is published eight times a year. Other Council publications include a digest of Council comments on compliance cases, informational brochures on the International Centre and the International Centre Committee, and a pamphlet describing Advisory Council functions and activities.

The Council also participated in the development of the 1973 amendment to the National Historic Preservation Act which extended the Council's authorization through 1985 as well as continuing the authorization for the Federal historic preservation grants program and United States participation in the International Centre. In addition, the Council prepared an analysis of the Environmental Protection Tax Act and a study of the impact of proposed revenue sharing programs on historic preservation.

Another significant undertaking by the Council, initiated in May 1973, is a comprehensive study of the nation's historic resources program. Designed as the Council's Bicentennial project, the study will examine and evaluate the effectiveness of present historic resource programs, analyze relevant legislation, identify economic factors affecting preservation, and determine the needs of an adequate national program. Scheduled for completion in 1974, the study will result in the submission of findings and recommendations to the President and the Congress.

(e) Historic Sites Survey: Fiscal year 1974, $574,000; fiscal year 1975, $578,000; increase, $4,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+4,000	--	$578,000		Annualization of classified pay increase.

Need for increase: An increase of $4,000 is requested to cover the additional costs in Fiscal 1975 of the classified pay raise authorized by Executive Order 11739, effective the first pay period on or after October 1, 1973. The part year costs in Fiscal 1974 are requested in a supplemental appropriation request for that year. This amount of $4,000 will annualize the cost in Fiscal 1975.

Program of Work: The Historic Sites Survey, conducted under the authority of the Historic Sites Act of 1935 (49 Stat. 666), is the program which identifies prime historic properties important to all Americans. These properties are eligible for the honorary distinction of National Historic Landmark.

A national historic landmark is a district, site, building, structure or object that possesses national significance in American history, architecture, archeology, or culture. To date there are 1,051 historic landmarks situated in all 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, and the Panama Canal Zone. Properties eligible for landmark status are designated by the Secretary of the Interior on recommendation of his Advisory Board on National Parks, Historic Sites, Buildings, and Monuments. Owners of eligible properties, on their application, are awarded a certificate and bronze plaque attesting to their importance in illustrating our national development. These owners agree to cooperate with the National Park Service to insure preservation of the site. The properties are also enrolled directly on the National Register of Historic Places.

The Historic Sites Survey identifies and evaluates sites through thematic studies of American history from prehistoric times to the present. Thematic studies scheduled for Fiscal 1975 are continuation of Architecture, completion of the revision and updating of the subtheme Science and Invention, continuation of studies in the field of Black History, revision and updating of subtheme Literature, Drama and Music, revision and updating of subtheme Political and Military Affairs, 1865-1900.

Publications in a hard-cover series record and disseminate the findings of the Historic Sites Survey to meet the wide and growing interest in historic sites. In Fiscal 1975 publications processing will continue on Lewis and Clark, The Presidents, The Civil War, and Educators and Teachers, which are being printed by the Government Printing Office. Final editorial work will be accomplished on: Signers of the Constitution, Sectionalists and Nationalists, Reformers and Humanitarians.

Examples of Recent Accomplishments: During the past year 108 new national landmarks were declared eligible for this status. These landmarks were initially identified and evaluated through the thematic studies under the Historic Sites Survey program.

Additionally, some 411 studies of potential national historic landmarks were completed for presentation to the Secretary of the Interior's Advisory Board so that the properties may be judged on their national significance. The Advisory Board, in turn, will make recommendations on the properties worthy of landmark status to the Secretary of the Interior.

Sales of the National Survey of Historic Sites and Buildings of hard-cover volumes continue to be a popular item for the Government Printing Office. Total sales figures as of June 1973 were as follows:

Soldiers and Brave	5,767
Propsector, Cowhand, and Sodbuster	37,614
Founders and Frontiersmen	24,623
Explorers and Settlers	28,595
Colonials and Patriots	39,063

(f) Historic American Buildings Survey: Fiscal year 1974, $442,000; fiscal year 1975, $448,000; increase $6,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+6,000	--	$448,000		Annualization of classified pay increase.

Need for increase: An increase of $6,000 is requested to cover the additional costs in Fiscal 1975 of the classified pay raise authorized by Executive Order 11739, effective the first pay period on or after October 1, 1973. The part year costs in Fiscal 1974 are requested in a supplemental appropriation request for that year. This amount of $6,000 will annualize the cost in Fiscal 1975.

Program of Work: Under the authority of the Historic Sites Act of 1935 (49 Stat. 666), the HABS program is conducted by the National Park Service through formal agreement with the American Institute of Architects and the Library of Congress. With the duty of documenting the Nation's architectural heritage, HABS continues to stimulate and respond to the growth of the preservation movement. Cooperation with historical and preservation groups, State and local governments and interested foundations has significantly broadened the effectiveness of the Survey.

The program objectives are: (a) To identify and document the national experience in the design and construction of buildings; (b) to encourage public interest and action in appreciation and preservation of the historic environment and (c) in compliance with Executive Order 11593, to provide information and assistance to Federal agencies concerning the Historic American Buildings Survey's standards and procedures of recording and documenting historic structures. New documentation in the form of measured drawings, photographs and descriptive and historic data is added regularly to the archives which are permanently maintained at the Library of Congress. Publication of catalogs and selections and the preparation of traveling exhibits brings the material before the public. When recording eligible structures, HABS prepares the necessary forms for the use of State Historic Preservation Officers in nominating buildings for inclusion in the National Register.

Examples of Recent Accomplishments:

The Fortieth Anniversary of the Historic American Buildings Survey. To commemorate the 40th anniversary of the Survey, HABS and the National Trust cosponsored an international symposium on measured drawings which was held at the Library of Congress and the New American Institute of Architects Headquarters Building on November 16 and 17, 1973.

Transmittal of Records. During Fiscal 1973, records for 143 buildings--including 474 drawings, 917 photographs, and 619 pages of written data were transmitted to the Survey's permanent archives in the Library of Congress. These figures represent a notable increase over Fiscal 1972 figures in nearly every category, and a 15.6 percent increase in total items transmitted.

Comprehensive Surveys and Documentary Projects. In Fiscal 1973, 10 comprehensive summer student recording projects were initiated in Tennessee, Virginia, Florida, Nevada, New York, Wyoming, Rhode Island, Texas, Oklahoma and New Jersey. In Fiscal 1973, photo-data documentation projects added records on 62 structures in 11 States. In addition over 200 structures in five States were photographed.

Publications. The HABS publications program comprised of three categories: the State Catalog series, the "Selections" series, and a variety of folio publications based on both HABS graphic records and documentary research made significant advancement in the past year.

State Catalogs. The Survey will publish a complete series of State and regional catalogs by 1976. To date, eight catalogs of the collection have been published. During Fiscal 1973, contracts were issued for 10 additional catalogs. To date some 68 percent of the catalogs are completed or near completion.

Selection Series. Two volumes in the series were published in Fiscal 1973, one dealing with a recently destroyed urban complex in Rome, New York, and the other with the 19th century architecture of Carson City, Nevada. More recently, another volume dealing with buildings in Cleveland, Ohio, has been published.

Publications Based on HABS Material. HABS assists publishers interested in the collection by selecting and/or making arrangements for the reproduction of photographs and drawings. During Fiscal 1973, several major works using HABS records were published: Lost America (Vol. II) by Constance M. Greiff, published by Pyne University Press, has 11 percent of its illustrations taken from the collection Historic Buildings of Ohio, by Walter C. Kidney, and Historic Buildings of Washington, D. C., by Diane Maddex, both published by Ober Park Press, are illustrated entirely with material in the HABS collection.

Donations. During Fiscal 1973, financial donations totaling $57,700 were made to HABS in support of various projects. In addition to cash contributions, various cooperating agencies contributed an estimated $35,000 in kind. In Fiscal 1973, the value of records donated to HABS exceeded $20,000. Total estimate for donations in Fiscal 1973--$102,700.

Exhibitions. Four exhibitions of HABS salon prints, developed on thematic bases were prepared and circulated among university student unions in Fiscal 1973. A major exhibition, "Documenting a Legacy," opened at the Library of Congress on November 1, 1973. All of these exhibitions, unlike the HABS exhibitions of previous years, were designed and produced within the Survey's Washington Office.

(g) Historic American Engineering Record: Fiscal year 1974, $233,000; fiscal year 1975, $236,000; increase, $3,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+3,000	--	$236,000		Annualization of classified pay increase.

Need for increase: An increase of $3,000 is requested to cover the additional costs in Fiscal 1975 of the classified pay raise authorized by Executive Order 11739, effective the first pay period on or after October 1, 1973. The part year costs in Fiscal 1974 are requested in a supplemental appropriation request for that year. This amount of $3,000 will annualize the cost in Fiscal 1975.

Program of Work: The Historic American Engineering Record is conducted under the authority of the Historic Sites Act of 1935 (49 Stat. 666) in partnership with the Library of Congress and the American Society of Civil Engineers. It identifies and documents the engineering and industrial heritage of the Nation to develop a permanent record of the role technological achievement has played in creating the present American environment. The resulting archives are permanently maintained in the Library of Congress. HAER gives advice and assistance to State and local organization as requested pertaining to engineering history and industrial archeology. Compliance with Executive Order 11593 adds further responsibilities for recording and advising Federal agencies on the documentation of engineering and industrial sites. Projects are conducted in cooperation with interested public and private groups, and their cooperation includes the donation of funds and services. The increase in public awareness and support of HAER is readily apparent. During Fiscal 1973, $63,665 was donated in money and services, a significant increase over Fiscal 1972.

Examples of Recent Accomplishments:

Comprehensive surveys. During Fiscal 1973, comprehensive surveys were continued for a second year in the States of Indiana and West Virginia, and a new survey was undertaken in the Great Falls/Society for Establishing Useful Manufactures Historic District in Paterson, New Jersey. A Statewide survey of Utah was completed. These surveys involved the preparation of measured engineering and architectural drawings, photographs, photocopies, maps, historical reports, and engineering analyses for sites of historic engineering and industrial significance.

Inventories. Since the beginning of Fiscal 1973 inventories of historic sites were completed in the six New England States of Maine, Vermont, New Hampshire, Massachusetts, Connecticut, and Rhode Island, as well as in Florida. An inventory was continued in the Southwestern States of Texas, New Mexico, Arizona, California, Nevada, and Colorado, and a new inventory was begun in Oklahoma.

Emergency recording projects. A new program of documenting significant engineering and industrial sites in danger of destruction or drastic alteration has been initiated. During Fiscal 1973, three structures were recorded under this program, including a whale oil factory in New Bedford, Massachusetts; a wind turbine in Napoli, New York; and a railroad shop in Charleston, South Carolina.

Executive Order 11593. A fourth emergency recording project, undertaken in accordance with the terms set forth in Executive Order 11593, in cooperation with the Army Corps of Engineers, documented the Gruber Wagon Works in Mt. Pleasant, Pennsylvania.

Exhibitions. In cooperation with the American Society of Civil Engineers, an exhibit presenting the work of HAER in New York State and New York City was prepared for the inauguration of the New McGraw-Hill bookstore in Manhattan. An additional exhibit was installed at the annual meeting of the Economic History Association in Atlanta, Georgia.

Publications and reports. Two publications composed of HAER records have become available since the beginning of Fiscal 1973: A Report of the Mohawk-Hudson Area Survey, published by the Smithsonian Institution Press, and Water for the Southwest, published by the American Society of Civil Engineers. A report entitled "Historic American Engineering Record, State of Florida Inventory" was prepared by Florida Technological University. A comprehensive catalog of HAER records will be available early in 1974.

(h) Archeological Investigation and Salvage: Fiscal year 1974, 1,811,000; fiscal year 1975, $1,819,000; increase, $8,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+8,000	--	$1,819,000		Annualization of classified pay increase.

Need for increase: An increase of $8,000 is requested to cover the additional costs in Fiscal 1975 of the classified pay raise authorized by Executive Order 11739, effective the first pay period on or after October 1, 1973. The part year costs in Fiscal 1974 are requested in a supplemental appropriation request for that year. This amount of $8,000 will annualize the cost in Fiscal 1975.

Program of Work: The program of Archeological Investigation and Salvage is conducted primarily under authority of the Reservoir Salvage Act of 1960 (74 Stat. 220) wherein the Secretary of the Interior is required to perform archeological surveys and salvage ahead of Federal construction as expeditiously as possible. The objective is to retrieve archeological, historical, and paleontological values and data which otherwise will be lost as the result of federally funded or licensed reservoir construction and related water resources developments. The program is conducted by maintaining interagency liaison with Federal construction and licensing agencies, such as the Corps of Engineers, Bureau of Reclamation, Soil Conservation Service, Federal Power Commission, and others, to identify projects and needs and coordinate programming, and contracting

with qualified educational and scientific institutions to carry out the necessary investigations. Additionally, the Antiquities Act of 1906 (34 Stat. 255) and the Historic Sites Act of 1935 (49 Stat. 666) entrust the protection and preservation of antiquities to the Secretary of the Interior. Further responsibilities of the Secretary of the Interior and the National Park Service for providing interagency archeological expertise and guidance are required by the National Environmental Policy Act of 1969 (83 Stat. 852) and Executive Order 11593 of May 13, 1971.

Examples of Recent Accomplishments: During Fiscal 1973, the National Park Service carried out an extensive field program in salvage archeological research. The Service contracted for 85 individual archeological investigations with 43 qualified educational and scientific institutions, representing 31 States.

Washington State University continued its investigations in the Corps of Engineers' Lower Granite Lock and Dam Project. Last summer's work focused on a series of sites near the mouth of Alpowa Creek in Asotin County, Washington. The most important site here is the historic Nez Perce village of Alpaweyma, first noted by Lewis and Clark and later the focus of missionary activities by Henry H. Spalding in the 1830's. Although the excavations revealed that evidence of the historic village had been destroyed by farming, much earlier occupations were discovered. A series of house pits and well defined living surfaces attributable to at least three different phases of the long Snake River cultural sequence were found. The oldest dates from about 4,000-5,000 years ago.

Investigations by the University of Kansas at the Coffey Site, located in the northern portion of the Tuttle Creek Reservoir, has revealed nine occupational levels including a previously unknown early Archaic horizon in this part of the Central Plains area. Preserved faunal and floral assemblages have provided a detailed outline of subsistence patterns throughout the site's occupation and indicate an economic base primarily focused on bison and deer hunting supplemented by a variety of fish, waterfowl, small mammals and amphibians. This site has been partially destroyed by bank slumping caused by wave action in the reservoir.

A federally financed construction project for a new sediment basin for the Cherokee City Sewer Works, Iowa, exposed and partially destroyed an important and previously unknown archeological site. Emergency salvage excavations, under the joint direction of the University of Iowa and the Sanford Museum of Cherokee, Iowa, yielded evidence of three major occupation zones ranging in time from 6,000 to around 9-10,000 years ago. Analysis of the well preserved faunal remains associated with each level is expected to provide evidence of the post-Pleistocene climatic changes in this northwestern portion of Iowa. The Cherokee Sewer Site is the first excavated paleo-Indian campsite in Iowa and promises to become one of the most important stratified post-Pleistocene deposits of its type in North America.

Archeological excavations in the Tennessee Valley Authority's Tellico Dam project area has been underway for several seasons, and among the significant discoveries made more recently has been the finding of the Town House at Chota. This town was the home of the famous Cherokee Chief, Oconastota. The Tellico Dam project area is the recognized ancestral home, at least in historic times, of the Cherokee Indians, and work in other village sites in the project area has been initiated. It is expected that the archeological excavations in the several village sites will enable archeologists to reconstruct the traditional Cherokee way of life. It will further permit anthropologists to study the evolution of the Cherokee culture from the time of European contact until its relocation.

Recent excavations of a village site of the little known Allison-LaMotte culture in the central Wabash Valley are answering questions as to why and how such a cultural isolate survived for over 500 years until A.D. 500. Evidence of structures ranging from lightly constructed to unique double-walled, semisubterranean types, suggests a sedentary settlement pattern. Associated faunal and floral evidence in addition to the food processing technology employed further suggests a hunting and gathering subsistence pattern equivalent to similar size Hopewell villages of adjacent areas. Although the present excavation has not clarified southern cultural ties to date, it appears likely that an intensive and efficient system for the exploitation of localized food resources may account for the tenacity of the Allison-LaMotte Culture.

Excavations in the Copan Reservoir, Oklahoma, are currently in progress. Several rock midden sites are located in the reservoir area. These sites are similar to several rock mound sites which occur from central Texas through eastern Oklahoma into eastern Kansas and western Missouri. Although such sites have been known for several years, very little is known concerning the exact nature of the mounds regarding construction or function. In the Copan Reservoir one rock mound has been partially excavated and a second site is presently undergoing excavation. Together with those data gained from the present excavations and the existing ethnographic data, hypotheses are emerging explaining mound function. Additionally, field operations in the Copan Reservoir have served an educational function. Several local school and scouting groups have visited the sites with some supervised participation in the ongoing excavations.

Personnel Summary

	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions.....	140	140	148
Full-time equivalent of other positions....	30	57	57
Average paid employment.....	157	185	185
Average GS grade.....	8.8	8.8	8.8
Average GS salary.....	$14,066	$14,737	$14,737
Average salary of ungraded positions.....	$10,462	$10,921	$11,312

NATIONAL PARK SERVICE
PRESERVATION OF HISTORIC PROPERTIES

Itemization of Estimate

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) Decrease (-)
Program and Financing:				
Total obligations	$7,436,953	$20,617,556	$24,375,000	$+3,757,444
Unobligated balance available, start of year	-653,509	-4,775,556	--	+4,775,556
Unobligated balance available, end of year	4,775,556	--	--	--
Appropriation	11,559,000	15,842,000 1/	24,375,000	+8,533,000
1/ Includes $283,000 proposed supplemental for pay costs.				
Obligations by objects:				
11 Personnel compensation	$1,998,324	$2,425,000	$2,460,000	$+35,000
12 Personnel benefits	174,102	216,000	243,000	+27,000
21 Travel and transportation of persons	137,070	140,000	150,000	+10,000
22 Transportation of things	25,102	25,000	28,000	+3,000
23 Rent, communications, and utilities	20,174	24,000	30,000	+6,000
24 Printing and reproduction	71,800	80,000	110,000	+30,000
25 Other services	1,299,998	1,709,000	1,014,000	-695,000
26 Supplies and materials	99,507	120,000	150,000	+30,000
31 Equipment	38,110	50,000	70,000	+20,000
32 Lands and structures	102,047	110,000	120,000	+10,000
41 Grants, subsidies, and contributions	3,470,719	15,718,556	20,000,000	+4,281,444
Total obligations	7,436,953	20,617,556	24,375,000	+3,757,444

NATIONAL PARK SERVICE

Planning, Development and Operation of Recreation Facilities

Appropriation, 1973	$ -0-
Appropriation, 1974	$30,378,000

Summary of Increases and Decreases, 1975

Decreases:	
Recreation Facilities	-18,478,000
Budget Estimate, 1975	11,900,000

Planning, Development, and Operation of Recreation Facilities

Analysis by Activities

Activity	Amount Available 1974	Fiscal Year 1975			Total available 1975 compared to total available 1974
		Estimated Total Available	Unobligated Balance from 1974	Budget Estimate	
1. Recreation facilities	$30,378,000	$11,900,000	--	$11,900,000	$-18,478,000

1. Recreation Facilities: Fiscal year 1974, $30,378,000; fiscal year 1975, $11,900,000; decrease, $18,478,000. The decrease consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $-18,478,000	+25	$11,900,000	168	Reflects revenues of one-year estimated to be available in Fiscal 1975; compared to estimated receipts for two and one-half years reported in Fiscal 1974.

Program of Work: An amount of $11,900,000 is proposed for the planning, development and operation of recreational facilities, including enhancement of fee collection systems. Authority for this program originates from Public Law 92-347, approved July 11, 1972, whereby fees collected by the National Park Service for admission to designated units of the System and for special recreation-use facilities are earmarked for appropriation for its own use.

The amount of $11,900,000 represents the fees estimated to be collected during Fiscal 1975 and accordingly are requested to carry out the following programs.

Enhancement of Fee Collection Systems

An amount of $6,000,000, which is the same as the amount available in Fiscal 1974, is requested for enhancement of fee collection systems, including improvement of fee collection facilities. The main objective of this program will be to provide for fee collection areas adequately staffed and sufficient in number to provide equitable assessment of fees, to eliminate congestion at entrance areas and adjacent areas, to promote efficient collection of fees, and to avoid undue delays of the visitors' park outing.

Public Law 92-347, signed July 11, 1972, authorizes an amount not to exceed 40 percent of the amount credited for the 5 years following enactment of the act, to be used to enhance fee collection systems.

This program was established to provide the Service and other collecting agencies improved methods for both promoting the fee program so that the visiting public will understand where and why fees are collected and how the proceeds are being used; and enforcing the program to assure that equitable assessment of fees are made through adequate administration of the program.

This program will also serve as a stimulus for expanding a reservation system, on a contract basis, to insure visitors a quality park experience on an equitable basis as well as prevent overcrowding of certain parks where irreplaceable resources are threatened.

This funding will also permit designation of additional fee areas which will require development of additional collection facilities. The net result of this effort will be more equitable assessment of fees.

Previously, visitors were entering potential fee areas without charge due to the lack of funding needed for construction of entrance station facilities and personnel required to operate the stations.

It is anticipated that the proposed $6,000,000 will substantially improve the fee collection systems and its operations will approach prescribed standards.

Examples of Recent Accomplishments: During Fiscal 1974, the Service began to implement a fee enhancement program by providing additional staffing to some of the areas experiencing heavy congestion at fee entrance areas. The additional personnel has permitted a more efficient flow of traffic into the park areas eliminating long waiting lines of cars at the entrance areas. Previously, in some areas, the traffic backup was so severe that cars were signaled to go through the entrance area without paying for admission to the park. It is intended that when all fee collection areas are brought up to standard, increased revenues will result as entrance fees will be collected from all visitors at the designated fee collection areas. Additionally, to further expedite collections, new kiosks and other appropriate fee collection stations are being placed into operation.

Alternate Transportation Systems

An amount of $4,608,000 is requested to continue, improve and expand a program of alternate transportation systems in Fiscal 1975 at those park areas where present traffic patterns indicate such a need. This program, originally initiated at Yosemite National Park during Fiscal 1972 as a pilot program, was aimed at eliminating traffic congestion within the parks, thereby reducing pollution and lessening the adverse impact on the resources. An equally important objective of the program was to enhance the visitors park experience by freeing many visitors of the driving tasks while in the park and providing additional interpretive services to the visitor while in transit on the alternate transportation vehicles. Additionally, the importance of this program is further justified in light of the current energy crisis and the fuel savings that can be realized by operating alternate transportation systems within the parks and by establishing them as linkage points with mass transportation systems.

Because, the alternate transportation systems program in its pilot stages at Yosemite and then at Mount NcKinley and Everglades National Parks, proved successful in eliminating traffic congestion and lessening the adverse impact on the resources as evidenced by the widespread acceptance by both park managers and the visiting public the program has emerged as a major program objective of the Service.

Operations of alternate transportation systems have proved to be a viable means of providing a quality park experience for an ever-increasing visiting public. Additionally, the vehicles providing transit for the park visitors offer an ideal place for interpreters to convey the park story.

Further, these transportation systems can significantly contribute to energy conservation and establish a new direction toward widespread use of public transportation systems. For example, alternate transportation vehicles with capacities of 65 to 100 passengers, operating at a typical 55 percent average passenger load, will require only 20 percent as much fuel as private vehicles, averaging 3.6 passengers, performing the same slow speed, stop and go driving tasks. During heavy visitor use season, when transit vehicles will operate near 100 percent capacity, only 11 percent as much fuel is required. A specific example of a park transportation system's fuel saving would be at Grand Canyon National Park. During July and August, there are up to 140,000 cars per month, of which, approximately 42,000 would be traveling the South Rim which would be involved in some village traffic. The total mileage for the transit system would require 12,000 gallons per month as compared to 60,000 to 108,000 gallons for the private cars doing the same transportation tasks.

Accordingly, the Service proposes to expand, improve and refine operations of transportation systems and to provide additional interpretive services while the visitors are in transit and an increased number of buses with improved scheduling.

The Service plans to conduct studies for alternate transportation systems. This program was initiated to improve resource preservation and provide improved visitor experience for more people. Through this planning effort, the Service is determining ways to reduce or eliminate the need for the use of private vehicles in certain National Park Service areas. In light of the current energy crisis, the studies will examine means of providing alternate transportation systems within park areas as linkage points with transportation systems to parks, where possible, thereby further eliminating the need for visitors to use private vehicles.

Studies undertaken reveal the need for various alternate or mass transportation systems in certain parks including related-park facilities to support these systems. Support facilities include areas where transition from other vehicles to mass transit can occur, terminal buildings and maintenance facilities. The acquisition of transportation equipment and actual development of transportation systems is being determined as part of the individual studies.

Examples of Recent Accomplishments: Improvement of operating alternate transportation systems continued in Fiscal 1974 as more efficient scheduling of and additional trams and buses were made available for the visitors. Also, interpretive services made available to the park visitor, while in transit, were expanded.

Studies of additional alternate transportation systems continue to be carried out in Fiscal 1974 for those areas where traffic patterns indicate such a need. In an effort to promote energy conservation measures, emphasis is being directed to systems for areas close to heavily populated cities, and/or areas adjacent to designation points for air, bus and railroad routes.

Planning, Rehabilitation and Repair of Recreation Facilities

An amount of $1,292,000 is requested to provide for planning, rehabilitation and repair of recreation facilities. Funds are required annually for major alterations, repair, rehabilitation or replacement of existing facilities. This program consists primarily of numerous small projects for which specific project identification is not now known. The requirements for the type of projects financed under this program arise throughout the year, many of which are of an emergent nature, and are accomplished according to priority.

Personnel Summary

	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions	--	143	168
Full-time equivalent of other positions	--	307	342
Average paid employment	--	434	469
Average GS grade	--	8.8	8.8
Average GS salary	--	$14,737	$14,737

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NATIONAL PARK SERVICE
PLANNING, DEVELOPMENT, AND OPERATION OF RECREATION FACILITIES

Itemization of Estimate

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) Decrease (-)
Program and Financing:				
Total obligations (appropriation)	--	$30,378,000	$11,900,000	$-18,478,000
Obligations by objects:				
11 Personnel compensation	--	$3,717,000	$4,076,000	$+359,000
12 Personnel benefits	--	332,000	401,000	+69,000
21 Travel and transportation of persons	--	353,000	215,000	-138,000
22 Transportation of things	--	105,000	30,000	-75,000
23 Rents, communications, and utilities	--	896,000	905,000	+9,000
24 Printing and reproduction	--	14,000	20,000	+6,000
25 Other services	--	6,678,000	3,528,000	-3,150,000
26 Supplies and materials	--	1,332,000	1,200,000	-132,000
31 Equipment	--	468,000	450,000	-18,000
32 Lands and structures	--	16,483,000	1,075,000	-15,408,000
Total obligations	--	30,378,000	11,900,000	-18,478,000

John F. Kennedy Center for the Performing Arts

Supplemental appropriation, 1973	$2,000,000

Summary of Increases and Decreases, 1974

Increased operating costs	$+400,000
Appropriation, 1974	2,400,000

Summary of Increases and Decreases, 1975

Annualization of Classified Pay Increases	+20,000
Budget Estimate, 1975	2,420,000

Analysis by Activity

Activity	Fiscal Year 1973 Amount Available	Fiscal Year 1974 Total Appropriation	Fiscal Year 1974 Transfers	Fiscal Year 1974 Amount Available
John F. Kennedy Center for the Performing Arts	$2,000,000	$2,400,000	--	$2,400,000

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 compared with 1974
John F. Kennedy Center for the Performing Arts	$2,000,000	$2,400,000	$2,420,000	$+20,000

1. John F. Kennedy Center for the Performing Arts: Fiscal year 1974, $2,400,000; fiscal year 1975, $2,420,000; increase, $20,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+20,000	--	$2,420,000	82	Annualization of classified pay increase.

Need for increase: An increase of $20,000 is requested to cover the additional costs in Fiscal 1975 of the classified pay raise authorized by Executive Order 11739, effective the first pay period on or after October 1, 1973. The part year costs in Fiscal 1974 are requested in a supplemental appropriation request for that year. This amount of $20,000 will annualize the cost in Fiscal 1975.

Program of Work: An amount of $2,420,000 is requested for Fiscal 1975 to continue to provide services necessary for the non-performing arts functions of the John F. Kennedy Center at the same level as in Fiscal 1974. Beginning in Fiscal 1973, under the authority of Public Law 92-313, approved June 16, 1972, the National Park Service undertook a program to provide maintenance, security, information, interpretation, janitorial and all other services necessary for the non-performing arts functions of the John F. Kennedy Center for the Performing Arts, valued in excess of $70 million. Authority to continue this program through Fiscal 1975 is contained in Public Law 93-67, approved July 10, 1973.

Visitation during Fiscal 1973 was 2,300,000 or an average in excess of 6,400 visitors for each of the 359 days it was open. This excludes visitation connected with the performing arts functions. The National Park Service is committed to providing a quality interpretive program worthy of a national memorial to a former President. In addition to this interpretive function the Service is engaged in providing maintenance, security, information, janitorial and other services required to protect and preserve this national memorial.

Examples of Recent Accomplishments: During Fiscal 1973, the National Park Service carried out maintenance, security, information, interpretation, janitorial, and all other services necessary to the non-performing arts functions of the Center at an acceptable standard. Considering the Center has some 1.5 million square feet of usable space, the overall maintenance activity is considerable. The National Park Service is continuing to provide interpretive and informational services to the visiting public through a joint program with the Friends of the Kennedy Center, utilizing the professional interpretive staff of the Park Service and the volunteer members of the Friends.

Personnel Summary

	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions ...	82	82	82
Full-time equivalent of other positions	12	21	21
Average paid employment	74	96	96
Average GS grade	8.8	8.8	8.8
Average GS salary	$14,066	$14,737	$14,737
Average salary of ungraded positions ..	$10,462	$10,921	$11,312

NATIONAL PARK SERVICE
JOHN F. KENNEDY CENTER FOR THE PERFORMING ARTS

Itemization of Estimate

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) Decrease (-)
Program and Financing:				
Total obligations (appropriation)	$2,000,000	$2,400,000	$2,420,000	$+20,000
Obligations by objects:				
11 Personnel compensation	$676,554	$956,000	$962,000	$+6,000
12 Personnel benefits	56,472	94,000	94,000	--
21 Travel and transportation of persons	1,243	2,000	2,000	--
22 Transportation of things	1,036	2,000	2,000	--
23 Rent, communications, and utilities	496,278	532,000	532,000	--
24 Printing and reproduction	927	2,000	2,000	--
25 Other services	469,569	481,000	495,000	+14,000
26 Supplies and materials	248,851	278,000	278,000	--
31 Equipment	47,782	51,000	51,000	--
42 Insurance claims and indemnities	1,288	2,000	2,000	--
Total obligations	2,000,000	2,400,000	2,420,000	+20,000

NATIONAL PARK SERVICE

Administrative Provisions

PASSENGER MOTOR VEHICLES

Authority is requested for the purchase of 167 passenger motor vehicles of which 112 shall be for replacement only, including 104 for police-type use. The 55 additional passenger motor vehicles (new acquisitions) are requested to support new areas where GSA Interagency Motor Pool facilities are not available, and to replace existing sedan delivery vehicles with conventional six-passenger station wagons.

Because of production changes instituted by the automobile industry, the only sedan delivery remaining on the market is unsuited for law enforcement and public safety uses. It is not offered with the special features of equipment for police usage as set forth in Interim Federal Specification KKK-A-00811, Types II and III. It is not available with a wheelbase suitable for rescue work, because it is too short to accept a standard litter or stretcher.

Approximately 83 percent of all the vehicles to be replaced (including the 25 sedan deliveries) will meet the mileage standard for replacement as prescribed by the General Services Administration. The remainder will qualify by reason of age. The majority of the passenger motor vehicles maintained by the National Park Service (as opposed to those passenger motor vehicles obtained from GSA Interagency Motor Pools) are used in law enforcement and public safety work. This results in unusually high mileage within a relatively short period of time and an accelerated replacement schedule.

All vehicles to be replaced (including the 25 sedan deliveries) have been fully depreciated and can be replaced without additional funding.

AIRCRAFT

Authority is requested for the purchase of four aircraft, two of which are new acquisitions and two replacements. The aircraft are needed in the following areas:

	Type	Number
New:		
United States Park Police	Helicopter	2
Replacement:		
Glen Canyon National Park	Fixed Wing Aircraft	1
Southeast Region	Fixed Wing Aircraft	1
	Total	4

Funding of Geological Survey Programs (Obligations)

	Actual 1973	Estimate 1974	Estimate 1975
Special resource and environmental projects:			
Direct appropriation	$3,802,998	$4,232,000	$11,358,000
Total	3,802,998	4,232,000	11,358,000
Alaska pipeline related investigations:			
Direct appropriation	1,238,950	905,000	347,000
Total	1,238,950	905,000	347,000
Topographic surveys and mapping:			
Direct appropriation	35,172,210	36,784,000	44,688,000
States, counties, and municipalities:			
Matched Federal funds	3,688,637	4,800,000	5,000,000
Unmatched	30,000	--	--
Miscellaneous non-Federal sources	600,217	780,000	880,000
National Aeronautics and Space Administration	207,024	360,000	70,000
National Science Foundation	198,429	100,000	100,000
Bureau of Indian Affairs	60,000	120,000	150,000
Miscellaneous Federal agencies	315,149	349,000	420,000
Total	40,271,666	43,293,000	51,308,000
Geologic and mineral resource surveys and mapping:			
Direct appropriation	40,446,458	46,720,000	73,090,000
States, counties, and municipalities	1,555,934	1,677,000	1,700,000
Kingdom of Saudi Arabia	2,246,665	2,163,500	2,100,000
Miscellaneous non-Federal sources	58,710	23,500	24,000
Atomic Energy Commission	2,133,512	2,611,000	2,900,000
Agency for International Development	1,975,418	1,084,300	1,100,000
Department of Defense:			
Military	1,399,520	2,175,600	950,000
Civilian	31,406	169,100	170,000
National Aeronautics and Space Administration	4,708,129	5,358,500	4,890,000
Department of Housing and Urban Development	293,703	644,300	820,000
National Science Foundation	135,316	979,900	800,000
National Oceanic and Atmospheric Administration	--	2,411,000	--
Veterans Administration	51,853	1,260,300	1,250,000
Office of Saline Water	156,515	93,900	100,000
Miscellaneous Federal agencies	337,056	465,100	104,000
Total	55,530,195	67,837,000	89,998,000

	Actual 1973	Estimate 1974	Estimate 1975
Minerals Discovery Loan Program:			
Direct appropriation	$ 445,853	$ 333,000	$ 203,000
Total	445,853	333,000	203,000
Water resources investigations:			
Direct appropriation	40,530,097	45,480,000	53,349,000
States, counties, and municipalities:			
Matched	20,936,128	24,456,000	26,100,000
Unmatched	1,799,996	1,000,000	1,000,000
Permittees and licensees of the Federal Power Commission	560,381	650,000	650,000
Miscellaneous non-Federal sources	104,121	76,000	75,000
Atomic Energy Commission	876,789	1,091,000	1,100,000
Agency for International Development	513,750	505,000	500,000
Department of Agriculture	273,243	247,000	250,000
Department of Defense:			
Military	582,079	493,000	500,000
Civilian	6,371,181	6,889,000	7,025,000
Environmental Protection Agency	916,057	1,010,000	1,010,000
Department of Housing and Urban Development	1,801,174	3,105,000	3,105,000
National Aeronautics and Space Administration	342,502	355,000	200,000
National Oceanic and Atmospheric Administration	72,579	78,000	125,000
Tennessee Valley Authority	254,506	212,000	202,000
Department of State	266,856	263,000	275,000
National Park Service	459,323	471,000	450,000
Bonneville Power Administration	118,462	96,000	100,000
Bureau of Indian Affairs	88,687	183,000	150,000
Bureau of Land Management	207,098	127,000	120,000
Bureau of Reclamation	855,526	613,000	660,000
Bureau of Sport F & W	255,659	313,000	330,000
Miscellaneous Federal Agencies	262,213	245,000	263,000
Total	78,448,407	87,958,000	97,539,000
Conservation of lands and minerals:			
Direct appropriation	14,419,131	17,773,000	22,628,000
Miscellaneous non-Federal sources	3,066	4,000	4,000
Department of Defense - Military	23,733	25,000	25,000
Miscellaneous Federal agencies	20,892	5,000	5,000
Total	14,466,822	17,807,000	22,662,000
General Administration:			
Direct appropriation	2,872,000	3,087,000	3,191,000
Total	2,872,000	3,087,000	3,191,000
Facilities:			
Direct appropriation	686,477	5,761,000	10,986,000
Total	686,477	5,761,000	10,986,000

	Actual 1973	Estimate 1974	Estimate 1975
Earth resources observation systems:			
Direct appropriation	$10,356,988	$8,954,000	$ 7,573,000
Miscellaneous non-Federal sources	--	480,000	700,000
National Aeronautics and Space Administration	1,248,878	370,000	130,000
Miscellaneous Federal agencies	--	131,000	147,000
Total	11,605,866	9,935,000	8,550,000
Resource and land investigations program:			
Direct appropriation	$ --	$944,000	$954,000
Total	--	944,000	954,000
Land use data and analysis:			
Direct appropriation	--	--	2,509,000
Total	--	--	2,509,000
Miscellaneous services to other accounts:			
Miscellaneous non-Federal sources	47,141	43,000	46,000
Computer services for other bureaus and agencies	1,991,000	2,415,000	2,660,000
Miscellaneous Federal agencies	537,093	535,000	572,000
Total	2,575,234	2,993,000	3,278,000
Summary:			
Direct appropriation	149,971,162	170,973,000	230,876,000
States, counties, and municipalities	28,010,695	31,933,000	33,800,000
Miscellaneous non-Federal sources	3,620,301	4,220,000	4,479,000
Other Federal agencies	30,342,310	37,959,000	33,728,000
Total	211,944,468	245,085,000	302,883,000

GEOLOGICAL SURVEY
Summary Energy Research and Development Analysis 1/
Surveys, Investigations, and Research
(Dollars in thousands)

Activity project or program	FY 1974 Amount available	FY 1975 Regular budget	FY 1975 Budget Amendment H.D.	FY 1975 Total Request	Increase (+) or decrease (-) 1975 compared with 1974
Special resource and environmental projects:					
Geothermal investigations	$ 2,947	$ 2,964	$ 7,100	$ 10,064	$ +7,117
Geologic and mineral resource surveys and mapping:					
Land resource surveys:					
Environmental energy onshore	--	500	4,000	4,500	+4,500
Mineral resource surveys:					
Oil and gas resource investigations	1,393	888	4,000	4,888	+3,495
Oil shale resource investigations	403	440	600	1,040	+637
Coal resource assessment	1,011	996	600	2,496	+1,485
Coal environmental analysis			900		
Energy resource data system	--	--	1,400	1,400	+1,400
Uranium/Thorium investigations	1,239	974	3,200	4,174	+2,935
Energy-related non-fuel investigations	943	943	500	1,443	+500
Offshore geologic surveys:					
Environmental energy offshore	--	700	500	1,200	+1,200

Water resources investigations:					
Critical national water problems:					
Underground heat storage	--	--	100	100	+100
Oil shale hydrologic research	-- 2/	-- 2/	1,200	1,200	+1,200
Coal water supply and quality	-- 2/	-- 2/	1,200	1,200	+1,200
Subtotal, Energy R&D	7,936	8,405	25,300	33,705	+25,769
All other activities	162,966	197,166	--	197,166	+34,200
Total, Surveys, Investigations and Research	170,902	205,571	25,300	230,871	+59,969

1/ This table shows the relation of the FY 1975 budget amendment for the accelerated energy R&D program to the regular FY 1975 budget request and the FY 1974 amount available.

2/ Base funds are not shown for these items of increase since they are directly related to and supportive of programs in other subactivities as well as those shown on this table.

Surveys, Investigations, and Research

Appropriation, 1973		$150,450,000
Transferred to other accounts		-1,064,000
Total available, 1973		149,386,000
Appropriated, 1974	159,536,000	
Supplemental appropriation, 1974	1,846,000	
Pay cost supplemental	9,520,000	
Total available, 1974		170,902,000

Summary of Increases and Decreases, 1975

	Base for 1975	Increase 1975	
Special resource and environmental projects:			
For exploration technology	--	+1,200,000	
Identification of target areas; national resource estimates	--	+2,500,000	
Development of techniques for predicting energy potential of specific reservoirs	--	+2,100,000	
For environmental aspects of geothermal resource development	--	+900,000	
For geochemical control of reservoir permeability	--	+400,000	
Annualization of the October 1973 pay raise	--	+26,000	+7,126,000
Alaska pipeline related investigations:			
Reduction in activities and scope of program	905,000	-558,000	-558,000
Topographic surveys and mapping:			
To accelerate orthophotoquad preparation in areas unmapped at 1:24,000	2,599,000	+1,901,000	
To develop and apply advanced technology in the utilization of special source material for mapping	360,000	+3,000,000	
To reimburse GSA for rental of space	--	+2,537,000	
Annualization of the October 1973 pay raise	--	+466,000	+7,904,000

Geologic and mineral resource surveys and mapping:			
Environmental geology of onshore energy development	--	+4,500,000	
To consolidate the seismic and geomagnetic observatories program in the Geological Survey	9,375,000	+2,405,000	
Coal resource assessment and environmental analysis	1,011,000	+1,400,000	
Oil and gas resource investigations onshore	1,393,000	+3,415,000	
Oil shale resource investigations	403,000	+600,000	
Uranium/Thorium resource assessment	1,239,000	+2,850,000	
Energy resources data system	--	+1,400,000	
Energy-related non-fuel mineral investigations	943,000	+500,000	
Alaskan mineral resource appraisal	1,927,000	+1,000,000	
Oil and gas resource investigations offshore	3,848,000	+3,800,000	
Assessment of energy-related offshore environmental problems	--	+1,200,000	
Completion of comparative study of U.S. - Canadian programs to stimulate mineral resource activities	150,000	-150,000	
To reimburse GSA for rental of space	--	+2,966,000	
Annualization of October 1973 pay raise	--	+484,000	+26,370,000
Mineral discovery loan program:			
Reduction of loan program	291,000	-93,000	-93,000
Water resources investigations:			
To provide water data in which Federal interest is paramount	19,259,481	+1,800,000	
Transfer of funds and personal services to data program of higher priority	--	-887,000	
Reimbursement to Bureau of Employees Compensation	--	+33,000	
Accelerated energy research and development program	--	+2,500,000	
To reimburse GSA for rental of space	--	+3,958,000	
Annualization of the October 1973 pay raise	--	+465,000	+7,869,000
Conservation of lands and minerals:			
To improve regulation of OCS oil and gas operations	6,299,000	+1,626,000	
To increase regulation of operations on Federal and Indian mineral leases commensurate with increased industry activity	5,364,000	+850,000	
To acquire and interpret geophysical data for accelerated schedule of OCS lease sales	3,784,000	+405,000	
Fulfillment of contract requirements for reservoir studies in connection with the Sun Oil Co. law suit	811,000	-811,000	
To acquire data and map, delineate, and evaluate high potential Federal coal lands	1,515,000	+1,380,000	
To reimburse GSA for rental of space	--	+996,000	
Annualization of the October 1973 pay raise	--	+409,000	+4,855,000

General administration:			
Annualization of the October 1973 pay raise	--	+104,000	+104,000
Facilities:			
Lease payments	3,250,000	+3,250,000	
For operation and maintenance of Headquarters facility	1,782,000	+1,889,000	
Movement of personal household goods	--	+800,000	
Reduction for non-recurring equipment items	700,000	-700,000	
Annualization of the October 1973 pay raise	--	+15,000	+5,254,000
Earth resources observation systems program:			
Reduction in planned scope of demonstration projects for solution of earth resources problems	8,954,000	-1,405,000	
Annualization of the October 1973 pay raise	--	+24,000	-1,381,000
Resource and land investigations program:			
Annualization of the October 1973 pay raise	--	+10,000	+10,000
Land use data and analysis program:			
To acquire, compile, analyze and disseminate land use data	--	+2,509,000	+2,509,000
Net increase, 1975			+59,969,000
Budget estimate, 1975			230,871,000

SURVEYS, INVESTIGATIONS, AND RESEARCH

Analysis by Activities

Activity	FY 1973 Amount Available	Fiscal Year 1974 Total Appropriation	Pay Cost Supplemental	Program Supplementals	Amount Available
1. Special resource and environmental projects	$3,802,998	$4,053,000	$179,000	$ --	$4,232,000
2. Alaska pipeline related investigations ----	1,238,950	850,000	55,000	--	905,000
3. Topographic surveys and mapping ----------	35,172,210	34,259,000	2,525,000	--	36,784,000
4. Geologic and mineral resource surveys and mapping ----------	40,446,458	42,945,000	2,740,000	1,035,000	46,720,000
5. Minerals discovery loan program ----------	277,000	272,000	19,000	--	291,000
6. Water resources investigations ----------	40,530,097	42,854,000	2,626,000	--	45,480,000
7. Conservation of lands and minerals --------	14,419,131	16,029,000	933,000	811,000	17,773,000
8. General administration ----------	2,872,000	2,831,000	256,000	--	3,087,000
9. Facilities ----------	--	5,700,000	32,000	--	5,732,000
10. Earth resources observation systems -------	10,356,988	8,843,000	111,000	--	8,954,000
11. Resource and land investigations program --	--	900,000	44,000	--	944,000
Unobligated balance lapsing ----------	270,168 1/	--	--	--	--
TOTAL ----------	149,386,000 2/	159,536,000	9,520,000	1,846,000	170,902,000

1/ Includes $8,000 in budgetary reserve that was not available for obligation.
2/ Excludes $1,064,000 transferred to other Bureaus within Department of Interior, Public Law 93-50, Second Supplemental Appropriations Act of 1973, as follows: 1432507-Education and Welfare Service, Bureau of Indian Affairs ($286,000); 1430700-Salaries and expenses, Bureau of Outdoor Recreation ($72,000); 1430953-Health and Safety, Bureau of Mines ($663,000 1430955-General Administration Expenses, Bureau of Mines ($43,000); A total of ($1,064,000).

SURVEYS, INVESTIGATIONS, AND RESEARCH

Analysis by Activities

Activity	FY 1973 Amount Available	FY 1974 Amount Available	FY 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
1. Special resource and environmental projects	$3,802,998	$4,232,000	$11,358,000	$+7,126,000
2. Alaska pipeline related investigations	1,238,950	905,000	347,000	-558,000
3. Topographic surveys and mapping	35,172,210	36,784,000	44,688,000	+7,904,000
4. Geologic and mineral resource surveys and mapping	40,446,458	46,720,000	73,090,000	+26,370,000
5. Minerals discovery loan program	277,000	291,000	198,000	-93,000
6. Water resources investigations	40,530,097	45,480,000	53,349,000	+7,869,000
7. Conservation of lands and minerals	14,419,131	17,773,000	22,628,000	+4,855,000
8. General administration	2,872,000	3,087,000	3,191,000	+104,000
9. Facilities	--	5,732,000	10,986,000	+5,254,000
10. Earth resources observation systems	10,356,988	8,954,000	7,573,000	-1,381,000
11. Resource and land investigations program	--	944,000	954,000	+10,000
12. Land use data and analysis	--	--	2,509,000	+2,509,000
Unobligated balance lapsing	270,168 1/	--	--	--
TOTAL	149,386,000 2/	170,902,000	230,871,000	+59,969,000

(See footnotes on following page)

FOOTNOTES

1/ Includes $8,000 in budgetary reserve that was not available for obligation.

2/ Excludes $1,064,000 transferred to other Bureaus within the Department of Interior, Public Law 93-50, Second Supplemental Appropriations Act of 1973.

1. Special Resource and Environmental Projects

FY 1974, $4,232,000; FY 1975 $11,358,000; Increase, $7,126,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$+7,100,000	+102	$10,064,000	120	For accelerated energy R&D
+26,000	--	--	--	Annualization of October 1973 pay raise
$+7,126,000	+102			

Analysis by Subactivity

Subactivity	FY 1973 Amount Available	FY 1974 Amount Available	FY 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
(a) Urban area studies	$ 986,698	$1,020,000	$1,027,000	$ +7,000
(b) Responsibilities under the Mining and Minerals Policy Act of 1970	254,002	265,000	267,000	+2,000
(c) Geothermal investigations	2,562,298	2,947,000	10,064,000	+7,117,000
Total obligations	3,802,998	4,232,000	11,358,000	+7,126,000

(a) Urban Area Studies: FY 1974, $1,020,000; FY 1975, $1,027,000; Increase, $7,000, for annualization of October 1973 Pay Raise.

Program of Work:	FY 1975
San Francisco Bay	$208,000
Seattle-Puget Sound	122,000
Phoenix-Tucson	122,000
Denver	143,000
Pittsburgh	141,000
Connecticut Valley	158,000
Baltimore-Washington	133,000
Total	1,027,000

Status of Program:

Development associated with the growth of cities and with the establishment of new communities may result in serious environmental damage and, in some cases, hazardous conditions unless appropriate earth-science information is effectively incorporated into the land-use planning and decision making processes. Accordingly, the major objective of the Urban Area Studies Program is to provide pertinent, readily understandable information on the geology, hydrology, topography, geography, geophysics, and geochemistry--disciplines that represent the core expertise of the Geological Survey--of selected urban-centered areas throughout the Nation.

The nine-county San Francisco Bay Region was the first area chosen for study in FY 1971, in cooperation with the U.S. Department of Housing and Urban Development, the California Division of Mines and Geology, and several local agencies and organizations. Thereafter, six additional urban areas were included in the program, including the Seattle-Puget Sound area; the Phoenix-Tucson area; the Colorado Front Range Urban Corridor, (which is roughly centered about Denver); the greater Pittsburgh area; the Connecticut Valley; and the Baltimore-Washington metropolitan area. These areas were chosen mainly on the basis of the potential usefulness of the anticipated products; geographic, geologic, and hydrologic diversity; amount of basic data and numbers of trained staff already available in each area; structure, function, and apparent strength of local and regional planning institutions; and, finally, local interest and willingness to particpate in the project, either formally or informally. In this regard, formal cooperative arrangements have been made with appropriate State Geological Surveys or with counterpart agencies. Formal cooperation with HUD in this program is limited to the San Francisco Bay Region Study.

The aforementioned major objective of the program is being accomplished as two subtasks: (1) developing and providing new types of problem oriented basic-data and interpretative maps and reports; and (2) establishing close formal and informal interactions with potential users to help make the products as responsive as possible to user needs, to demonstrate the utility of land-resources information to the potential users, and to educate the earth scientist regarding the special needs of the planner.

The San Francisco Bay Study, begun in FY 1971, is nearing completion. More than 60 maps and reports have been released, and these have influenced many significant land-use decisions in both the public and private sectors. In the public sector the study has influenced the revision of zoning and building regulations and the enactment of important legislation, including

county regulations regarding the preparation of environmental impact statements, and State legislation involving siting of hospitals and other critical facilities in hazardous areas, and seismic safety elements in the California General Plan requirements.

Studies in the other six areas have not yet been fully implemented, but nevertheless showed significant progress in FY 1974. More than 100 basic-data and interpretive maps and reports have been prepared thusfar as a result of these studies, and roughly an equal number are in various stages of preparation.

The thrust of the studies and resulting reports differ somewhat for each area, depending on local geologic and hydrologic conditions and related environmental problems associated with development. Included among the wide range of products released or in preparation are those concerned with geologic hazards such as earthquakes and landslides, environmental geochemistry, coal resources, sand and gravel deposits, availability and development of water supplies, waste disposal and water pollution, floods, and engineering properties of soils and rocks, application of earth-science information to land-use planning, land capability analysis, and a planning guidelines manual to the use of earth-science information. The latter three products are among thirteen interpretive reports being prepared during the final phase of the San Francisco Bay area, most of these reports will consider information and develop procedures that have National transfer value.

(b) Responsibilities Under the Mining and Minerals Policy Act of 1970; FY 1974, $265,000; FY 1975 $267,000; Increase, $2,000 for annualization of October 1973 Pay Raise.

Program of Work:

The mineral resource base of the Nation is being appraised in response to the Mining and Minerals Policy Act of 1970 (P.L. 91-631) which directs the Secretary of the Interior to submit an annual report to Congress that shall include a statement of the trend in utilization and depletion of mineral resources. National appraisals, which indicate the grade and volume of known resources and the location of territory favorable for finding new resources, are being made for the major mineral commodities. The national resource picture must be considered in the context of global abundance and these data are being gathered and evaluated. Exploration activities within the domestic private mineral industry, one measure of the "health" of this industry, are also reviewed and analyzed. The work is being done by commodity and regional geologists aided by a newly organized resource analysis group and a computerized data system.

Status of Program:

Professional Paper 820, reviewing the Nation's position with respect to the geologic availability of resources of more than 100 mineral and energy commodities, was published in May 1973. The report is broader in geological scope than the last published study of 1952. The new report provides a good foundation for further detailed appraisals of various commodities. In-depth studies of 13 commodities selected on the basis of their national importance are now underway (copper, gold, silver, lead, zinc, titanium, tungsten, and uranium) and several are nearing completion (aluminum, fluorine, helium, manganese, and rare earths).

The appraisal of our national resources continues to be strongly supported by the new Office of Resource Analysis, which is now operational, and its computerized resource information bank (CRIB).

(c) Geothermal Investigations: FY 1974, $2,947,000; FY 1975, $10,064,000; increase, $7,117,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+1,200,000	+17	$1,978,000	23	Exploration technology
(2)	+2,500,000	+37	3,252,000	42	Identification of target areas; national resource estimates
(3)	+2,100,000	+31	2,852,000	36	Development of techniques for predicting energy potential of specific reservoirs
(4)	+900,000	+12	1,051,000	14	Environmental aspects of geothermal resource development
(5)	+400,000	+5	400,000	5	Geochemical control of reservoir permeability
(6)	+17,000	--	--	--	Annualization of October 1973 pay raise
	$+7,117,000	+102			

Cost Factors Involved in Increase

(1) 17 permanent positions at an average annual rate of $22,000, $374,000; travel and transportation, $40,000; supplies and materials, $36,000; equipment, $150,000; research contracts and grants, $300,000; data processing and computer use, $35,000; communications, $15,000; drilling, $250,000.

(2) 37 permanent positions at an average annual rate of $22,000, $814,000; travel and transportation, $75,000; supplies and materials, $41,000; equipment, $175,000; research contracts and grants, $750,000; data processing and computer use, $80,000; communications, $15,000; drilling, $550,000.

(3) 31 permanent positions at an average annual rate of $22,000, $682,000; travel and transportation, $50,000; supplies and materials, $20,000; equipment, $175,000; research contracts and grants, $723,000; data processing and computer use, $40,000; communications, $10,000; drilling, $400,000.

(4) 12 permanent positions at an average annual rate of $22,000, $264,000; travel and transportation, $25,000; supplies and materials, $21,000; equipment, $150,000; research contracts and grants, $400,000; data processing and computer use, $35,000; communications, $5,000.

(5) 5 permanent positions at an average annual rate of $22,000, $110,000; travel and transportation, $10,000; supplies and materials, $5,000; equipment, $100,000; research contracts and grants, $160,000; data processing and computer use, $10,000; communications, $5,000.

Need for Increases:

The recent dramatic increase in the price of crude oil and related fuels has greatly enhanced the value of using other indigenous energy sources in the United States. As indicated by the first successful Federal geothermal lease sale on January 22, 1974, private industry is pursuing aggressively the geothermal energy potential of the country. Research and development efforts must be greatly accelerated in order to insure the success of the coming wave of geothermal exploration and exploitation. The increased program of the Geological Survey will be directed toward the following goals:

1. To develop the geophysical, geochemical and hydrological techniques necessary for locating geothermal resources of all types; for estimating their individual size, energy potential, and longevity; for providing a basis for estimating total National resources of geothermal energy; for evaluating individual Known Geothermal Resources Areas (KGRA's) prior to, and during leasing of the Federal lands; and for aiding the site selection for demonstration power plants planned by the Atomic Energy Commission and the National Science Foundation.

2. To identify promising target areas and regions for industrial exploration and development, to appraise the magnitude of both regional and National geothermal resource bases, and to assist in siting demonstration power plants. This program will draw heavily on exploration techniques developed under the program element described above.

3. To develop the knowledge and methodology for predicting the energy potential and longevity of geothermal reservoirs, and for making intelligent decisions concerning specific geothermal development sites. Investigations will be carried out wherever possible, in close cooperation with the Atomic Energy Commission and National Science Foundation for siting of their demonstration plants.

4. To develop the capability to predict the environmental impact of geothermal fluid withdrawal in terms of geologic and hydrologic hazards, such as land subsidence, induced earthquakes, ground and surface water pollution, and groundwater storage depletion. Prompt identification and quantification of environmental problems associated with development are required to create a climate in which industrial development can occur as rapidly as possible. It will help further utilization of the resource by evaluating the impact of development, by providing basic data for planning mitigating measures, and by providing data for preparation for environmental impact statements. In addition, biologic investigations will also be carried out in cooperation with the Bureau of Sport Fisheries and Wildlife.

5. To develop the basic knowledge of mineral stabilities and interactions of rocks, minerals, and geothermal fluids at various temperatures and pressures that will lead to methods of controlling the plugging of geothermal boreholes and surrounding rocks during extraction and reinjection of geothermal fluids. It will provide essential basic data to other parts of the Federal geothermal program concerned with the production of geothermal fluids, design and efficient operation of power plants, and the reinjection of waste brines. The information would be of enormous value to the geothermal industry.

Program of Work:	FY 1975
Geothermal exploration technology	$1,978,000
Location of geothermal target areas and estimates of national resources	3,252,000
Science and technology for determining the energy potential of specific geothermal reservoirs	2,852,000
Energy potential of deep, unexplored parts of geothermal reservoirs	241,000
Environmental impact of geothermal extraction: earthquakes, subsidence, groundwater disturbance	1,051,000
Geochemical control of reservoir permeability	400,000
Classification of Federal lands and supervision of Federal leases	290,000
Total	$10,064,000

Status of Program:

The current program of geothermal investigations consists of the following main elements:

(1) Geophysical studies at the Geysers/Clear Lake and Long Valley/Mono Lake and other areas aimed at improvement in exploration techniques have been broadened to include micro-seismic, active refraction seismic, and telluric methods, as well as heat flow measurements at shallow to moderate depths.

(2) Reconnaissance geological, geophysical, hydrological, and geochemical surveys, including hot spring sampling and analysis, are being carried out in Oregon, Nevada, Idaho, and Alaska; detailed geologic, geochemical, hydrologic, and geophysical studies started in FY 1972 at the Geysers/ Clear Lake and Long Valley/Mono Lake areas are well along and new geothermal studies are underway in the Jemez Mountains, New Mexico and Raft River Valley, Idaho. Subsurface temperatures and hydrologic parameters in the Gulf Coast area are being studied in order to evaluate the geothermal potential of the hot brines found at depth in that area.

(3) The physics and hydrology of geothermal areas are being modeled using computer technology in order to develop better methods for developing geothermal reservoirs.

(4) Initial studies of the deep, (+10,000') unexplored parts of one or more known geothermal reservoirs will get underway in FY 1975.

(5) Possible environmental effects of geothermal developments will be monitored with initial emphasis on the Imperial Valley, California, where the Bureau of Reclamation is conducting a geothermal resource pilot study.

(6) Supervision of operations on geothermal leases and the classification of additional geothermal resource areas.

2. Alaska Pipeline Related Investigations

FY 1974, $905,000; FY 1975, $347,000; decrease, $558,000. The decrease consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$-558,000	-17	$347,000	12	Reduction in activities and scope.

Program of Work:

The FY 1975 program continues engineering geologic and hydrologic investigations that will be needed through the pre-construction phase and into the initial operational and monitoring phase. Engineering geologic investigations of problem sites will include studies required to make engineering decisions relative to design, criteria, and conformity to permit stipulations.

The FY 1975 program will include:

(1) Engineering Geologic Investigations of problem sites, including stability of slopes and surficial materials, suitability and availability of geologic construction materials, and other studies required to monitor the construction phase.

Continuation of these investigations through the construction phase will provide opportunity to acquire critical permafrost information necessary in the monitoring phase of operations.

(2) Hydrologic Investigations have significance both in engineering design in the construction phase and in later monitoring. These include continued data gathering from established baseline stations, flood frequency, and magnitude modeling. Research studies will be limited to those pertinent to design criteria and permit stipulations.

Status of Program:

The Geological Survey's pipeline investigations program was begun by redirection of ongoing activities in late FY 1969 in response to the urgent needs for data and advice, created by the northern Alaska oil development and pipeline proposal. The basic data gathered to date have been published in various forms and provided to the Department of the Interior and other concerned agencies through conferences and the Interagency Technical Advisory Board. The Geological Survey had a major role in the preparation of the Environmental Impact Statement.

The Geological Survey in FY 1975 will continue to gather data for monitoring of pipeline construction.

3. Topographic Surveys and Mapping

FY 1974, $36,784,000; FY 1975, $44,688,000; increase $7,904,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanations
(1)	+$1,901,000	--	$4,500,000	102	To accelerate orthophoto-quad preparation in areas unmapped at 1:24,000 scale to provide bases for land-use planning and energy/resource identification and development.
(2)	+3,000,000	--	3,360,000	12	To develop and apply advanced technology in the utilization of special source material for mapping (recommended by Federal Mapping Task Force).
(3)	+2,537,000	--	--	--	Reimbursement for space, services and facilities provided by GSA in accordance with Public Buildings Amendments of 1972 PL 92-313.
(4)	+466,000	--	--	--	Annualization of October 1973 pay raise.
	+7,904,000	--			

Cost Factors Involved in Increases

(1) High-altitude aerial photography, $900,000; supplies and equipment, $401,000; contracts, $600,000.

(2) Purchase of advanced mapping equipment for Special Mapping Center, including computer support and training, $3,000,000.

(3) Funds to reimburse General Service Administration for space costs, $2,537,000.

Analysis by Subactivity

Subactivity	FY 1973 Amount Available	FY 1974 Amount Available	FY 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974	Page Reference
a. Quadrangle mapping and revision 1/	$33,432,984	$34,435,000	$41,913,000	+$7,478,000	24
b. Small scale and special mapping	1,739,226	2,349,000	2,775,000	+ 426,000	28
Total	35,172,210	36,784,000	44,688,000	+ 7,904,000	

1/ The quadrangle mapping and revision subactivity combines standard quadrangle mapping and revision and maintenance activities shown separately in previous budgets. Both programs contribute to quadrangle map production and maintenance.

a) Quadrangle Mapping and Revision [1]: FY 1974, $34,435,000; FY 75, $41,913,000; increase $7,478,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
+$1,901,000	--	$4,500,000	102	To provide 3,500 orthophotoquads as an accelerated means of covering unmapped areas valuable in implementing land-use planning and concurrently satisfies diverse needs for planimetric maps and photoimagery of the land surface.
+ 3,000,000	--	3,360,000	--	Allows initial development of an advanced technology capability within USGS to assure full use of special source material and allow flexibility to meet new and complex requirements.
- 211,000	--	--	--	Redirection from the Quadrangle and Revision base to Small Scale and Special Mapping to allow USGS to begin meeting urgent Federal Agency needs for special map data.
+ 2,350,000	--	--	--	Reimbursement for space, services and facilities provided by GSA in accordance with Public Buildings Amendments of 1972 PL 93-313.
+438,000	--	--	--	Annualization of October 1973 pay raise.
+7,478,000	--			

[1] Except for Alaska, maps are compiled at a scale of 1:24,000 (1 inch on the map represents 2,000 feet on the ground), in 7.5-minute quadrangle units, each containing about 57 square miles. In Alaska the norm is 1:63,360-scale maps (1 inch equals 1 mile), in 15-minute units, each containing about 225 square miles.

Need for Increase

Orthophotoquads [1] - Orthophotoquads are relatively inexpensive map substitutes which can be produced quickly to provide highly usable products before topographic-line maps are available. They are excellent tools and reference bases for monitoring land-use practices as well as managing natural resources and provide a

[1] An orthophotoquad is an aerial photograph or mosaic, prepared in standard quadrangle format, from which positional distortions have been removed to provide an accurate, uniform scale.

quick response product valuable in implementing land-use legislation while concurrently supporting other high-interest national concerns. Under the proposed FY 1975 program, about 2,000 orthophotoquads will be prepared with the $1,901,000 increase in areas not mapped at 1:24,000-scale. An additional 1,500 orthophotoquads will be prepared by the redirection of $1,340,000 from the quadrangle mapping base for a total of 3,500 more orthophotoquads than were produced in FY 1974. Continued funding will assure complete coverage of the conterminous United States by 1978 with up-to-date map products at the 1:24,000 scale. Such an effort allows USGS to implement a phased mapping approach (see figure 1) providing for a highly usable product early in the mapping process to meet urgent needs.

Advanced technology - Application of advanced techniques and equipment developed by the Department of Defense promises to allow GS to more effectively and efficiently meet the rapidly expanding national requirements for topographic maps and map-related products. This increase will allow the civilian mapping community to develop a new operational mapping capability by providing sophisticated instrumentation, computer support, and training. Considering the nature and urgency of mapping requirements resulting from critical national concerns such as environmental protection, land management, and resource/energy development, the advanced techniques capability should be exploited to provide needed national mapping capacity to insure that these important Federal requirements can be met.

Program of Work

FY 1975 will be the initial year of a new thrust for the National Topographic Program. Emphasis will be directed at (1) a comprehensive review of Federal and State mapping requirements; (2) production of new products to meet needs on a more timely basis; (3) wider use of special materials for a rapid and low cost updating of existing maps to make them usable in high priority areas of rapid change; (4) application of advanced mapping technology already developed in the Department of Defense and; (5) a fully operational National Cartographic Information Center that will collect, evaluate, classify, catalog, and disseminate information on maps, geodetic data, and aerial photography available for the United States. The primary goal of the FY 1975 program is to provide wider map coverage and a wider range of products to better meet urgent national mapping needs on a timely basis and avoid duplication of effort. Making available standard line maps, photoimage maps, and digital map data at the Federal level will encourage the development of consistent; and, hence, more useful procedures for land-use planning, resource inventory and management, and a host of other activities.

About 3,500 orthophotoquads will be prepared by utilizing the requested increase in combination with redirecting of base funds. These would be in addition to the 1,500 orthophotoquads already estimated for FY 1975 mostly under special agreements with Federal and State agencies resulting in a total production of about 5,000 orthophotoquads. In unmapped areas orthophotoquads will be the first of three phases of map production. They are followed by the advance copy of the line map and the published multicolor map (see figure 1).

During FY 1975 work will begin on about 100,000 square miles of standard topographic mapping. This program involves work in all States not completely mapped at the 1:24,000 scale. Combined priority requests received from Federal agencies as well as the added needs of State and local agencies will determine the areas programed.

The advanced technology project for FY 1975 will include updating two analytical plotters received from DoD and acquisition of a modern stereocomparator (computer

driven), two advanced analytic plotters (latest type), a computer that is necessary to make these operations most effective; and an orthophotosystem designed for use of special source materials.

The National Cartographic Information Center (NCIC) is an outgrowth of the Map Information Office which operated under the authority of OMB Circular A-16. In FY 1975 NCIC will provide a central cartographic information office in the Geological Survey for the purpose of collecting, classifying and furnishing to Federal and State agencies and the public, information concerning all mapping and surveying data available in Government departments and from other sources. The center will be expanded in 1975 to insure that available cartographic data will be channeled to users at a time when the need for map data is becoming more urgent as the basic input to automated systems, data banks, and interdisciplinary data requirements dealing with the land and its resources. The primary objectives are to provide a one-stop service to users of cartographic data to save critical time otherwise lost in searching for data and to avoid duplication of effort. By making products and data readily available, agencies will be encouraged to use existing materials rather than creating their own at additional cost.

Continued activity will be directed toward development of a consistent large-scale urban mapping effort. The objective will be to provide for an urban mapping program whereby consistent standards and specifications are provided to insure that requirements in the urban area are met with minimum expense and duplication. In FY 1975 we expect to complete an analysis of urban mapping use based on discussions with city officials who have either participated in pilot urban mapping efforts or have completed similar mapping projects of their own. The intent is not to establish a large in-house mapping effort within the Geological Survey but to provide for technical assistance and overall guidance as necessary.

More emphasis will be put on the revision of quadrangle maps. In 1975 revision output will be increased from the FY 1974 level of about 1,200 to about 1,500 maps. This approximates the rate of maps going out-of-date. Further effort will be needed to significantly impact the approximately 8,000 maps currently in need of revision. Using special source data, older maps are reviewed before revision procedures are started. Where source data are available this examination procedure will be extended to include all maps judged out-of-date based on age. This inventory will be used to evaluate the revision status and guide future program adjustments.

The number of maps needing reprinting continues to escalate due to increased demand for maps and the increasing inventory of completed maps. Approximately 2,000 maps are expected to be reprinted in FY 1975, an increase of 300 from FY 1974.

Status of Program

Quadrangle Mapping - At the end of FY 1973, published maps at 1:24,000 scale were available for 57% of the conterminous United States, Hawaii and outlying areas. Maps for an additional 20% were in progress. Figure 2 shows the status of mapping by states as of June 30, 1973.

The FY 1974 program included about $4,800,000 financed by State cooperative programs (see figure 3). About 20% of this amount is for revision.

In Alaska published maps at 1:63,360 scale were available for 80% of the State at the end of FY 1973. In FY 1973, 31 quadrangles of metric mapping at a scale of 1:25,000 (7.5-minute) were started in the Anchorage area.

Orthophotoquads - In FY 1973, the demand for orthophotoquads increased rapidly. In FY 1974 about 1,500 orthophotoquads will be produced many under special agree-

ments with Federal and State agencies, such as the Bureau of Indian Affairs, Soil Conservation Service and the State of Arizona.

Advanced Technology - Initial effort to apply advanced technology began in FY 1974 by acquiring at no cost two special analytical plotters from the Defense Mapping Agency for application of advanced techniques in the utilization of special source materials. Assigned personnel acquired special training and an operational mapping project was initiated.

NCIC - The formal reorganization of the Map Information Office into the National Cartographic Information Center will be completed in FY 1974. Much of the microfilm equipment has been delivered and is operating. Computer specifications and design of the communication "network" between the NCIC members and repositories of cartographic data will be underway in FY 1975.

Large-Scale Mapping - Pilot projects for conducting large-scale mapping research will be completed in FY 1974 in the cities of Fort Wayne, Indiana, and Charleston, South Carolina, and the results of these studies should provide guidelines for establishing standards for a national large-scale mapping program. The large-scale orthophotomapping was accomplished under contract, done to Federal specifications.

Map Revision - The number of maps needing revision continues to increase. Of the approximately 31,000 completed 7.5-minute maps about 25% are in need of updating. FY 1975 production will about equal the rate of maps going out of date but more effort is required to attack the backlog. About 800 urban maps per year require review or revision and many of these have been authorized for a second "interim" revision. All urban mapping is planned for review or revision on approximately a five-year cycle. About 60% of the current revision output is of urban areas.

Studies for land-use, census, and urban regional planning make it imperative that revision production be increased and maintained at a high level to insure that this national resource of topographic maps be kept up to date. In FY 1973 about 9.2 million copies of topographic maps were distributed, returning $2.9 million dollars to the treasury.

b) Small Scale and Special Mapping: FY 1974, $2,349,000; FY 1975, $2,775,000; increase $426,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
+$211,000	1/--	$2,775,000	115	Redirection of base funds from quadrangle mapping and revision subactivity to respond to increasing demand for special map products.
+ 187,000	--	--		Reimbursement for space, services and facilities provided by GSA in accordance with Public Buildings Amendments of 1972 PL 92-313.
+28,000	--	--		Annualization of October 1973 pay raise.
+426,000	--			

1/ No new positions needed. Redirected from "Quadrangle Mapping and Revision."

Need for Increase

This redirection of funds will permit the preparation of new small-scale maps and related products as a first step toward meeting new needs of high-interest national programs such as environmental protection, Federal land management, resource development, etc. The USGS must be in a position to respond to such needs to provide a sound basis for decision making.

Program of Work

The small-scale and special mapping program provides the national overview maps and related data required by Federal and State agencies concerned with the administration of national resources, control of the national air space, urban and regional planning, environmental programs, management of scientific programs, transportation planning, and national defense. In FY 1975 the objective will be to increase the capability to meet new and special needs of Federal agencies by providing such products as land-use, slope, county, and regional management maps as well as map-related products including digital terrain and cultural data.

The major component of the small-scale mapping program is the 1:250,000-scale series. This is the largest scale series that provides complete map coverage of the U.S. These maps are frequently used in planning activities and in developing regional information for a wide variety of disciplines and activities and serve as a base for display of information such as current land use. They also provide source material for smaller scale maps such as aeronautical charts, the state base map series, U.S. coverage of the International Map of the World series and other maps of the United States. It is planned to revise approximately 60 of these maps during FY 1975 using special source materials.

Other special map series will be continued such as the state base map series, the U.S. portion of the International Map of the World series and National Parks and Monuments maps. Preliminary planning will be completed for a revised edition of the National Atlas of the United States. The Atlas Separate Sales Program will be expanded.

Status of Program

Work on the 1:250,000-scale series of maps represents about half of the effort for small scale and special products. The series consists of 473 maps which completely covers the conterminous U.S. and Hawaii, plus 153 maps completely showing Alaska. The series is currently being revised at an annual rate anticipated to keep it current on about an eight-year cycle. Work will continue at a normal pace on the other components of the program. New products such as slope maps and county maps continue to be endorsed by Federal and State users including the contribution of funds towards their preparation.

PHASED MAPPING - A NEW APPROACH

OBJECTIVES: TO PROVIDE USER WITH SEQUENCE OF MAP PRODUCTS PROGRESSIVELY MORE COMPLETE.

1 ORTHOPHOTOQUAD
FIRST YEAR

- ONE-COLOR PHOTOIMAGERY
- SCALE CORRECTED
- REFERENCE GRIDS

2 COMPILATION MANUSCRIPT
SECOND YEAR

- CONTOUR LINES & ELEVATIONS
- DRAINAGE DELINEATION
- HIGHWAYS & ROADS
- LAND NET & CIVIL BOUNDARIES

(THESE TWO STEPS MAY BE COMBINED TO PROVIDE AN ADDITIONAL TOPOGRAPHIC PHOTOIMAGE PRODUCT)

3 PUBLISHED MAP
FOURTH YEAR

- PRINTED LINE MAP

Figure 1.

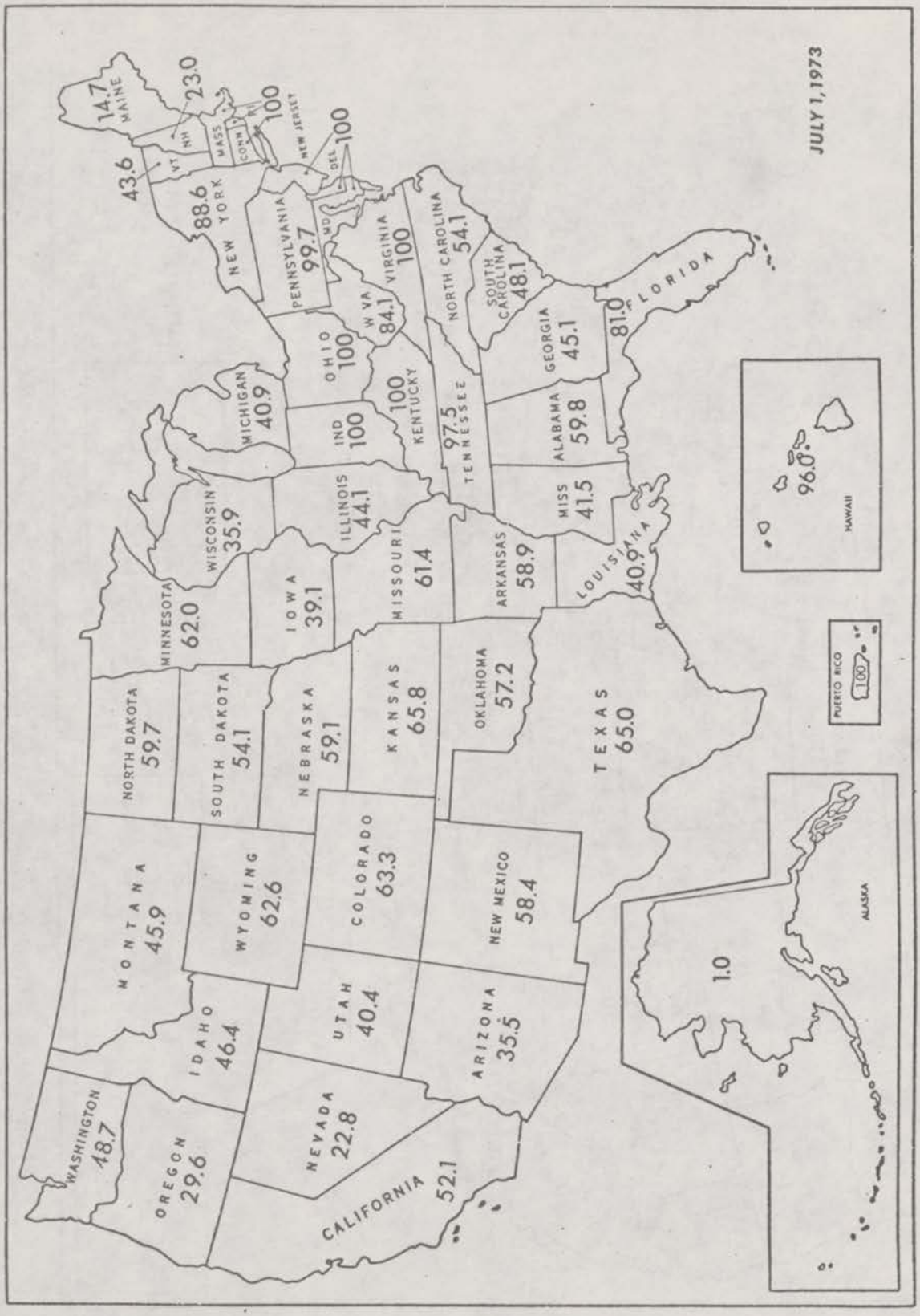

Figure 2 - Percentage of 7½-minute maps which have been published in each state.

29-393 O - 74 - 25

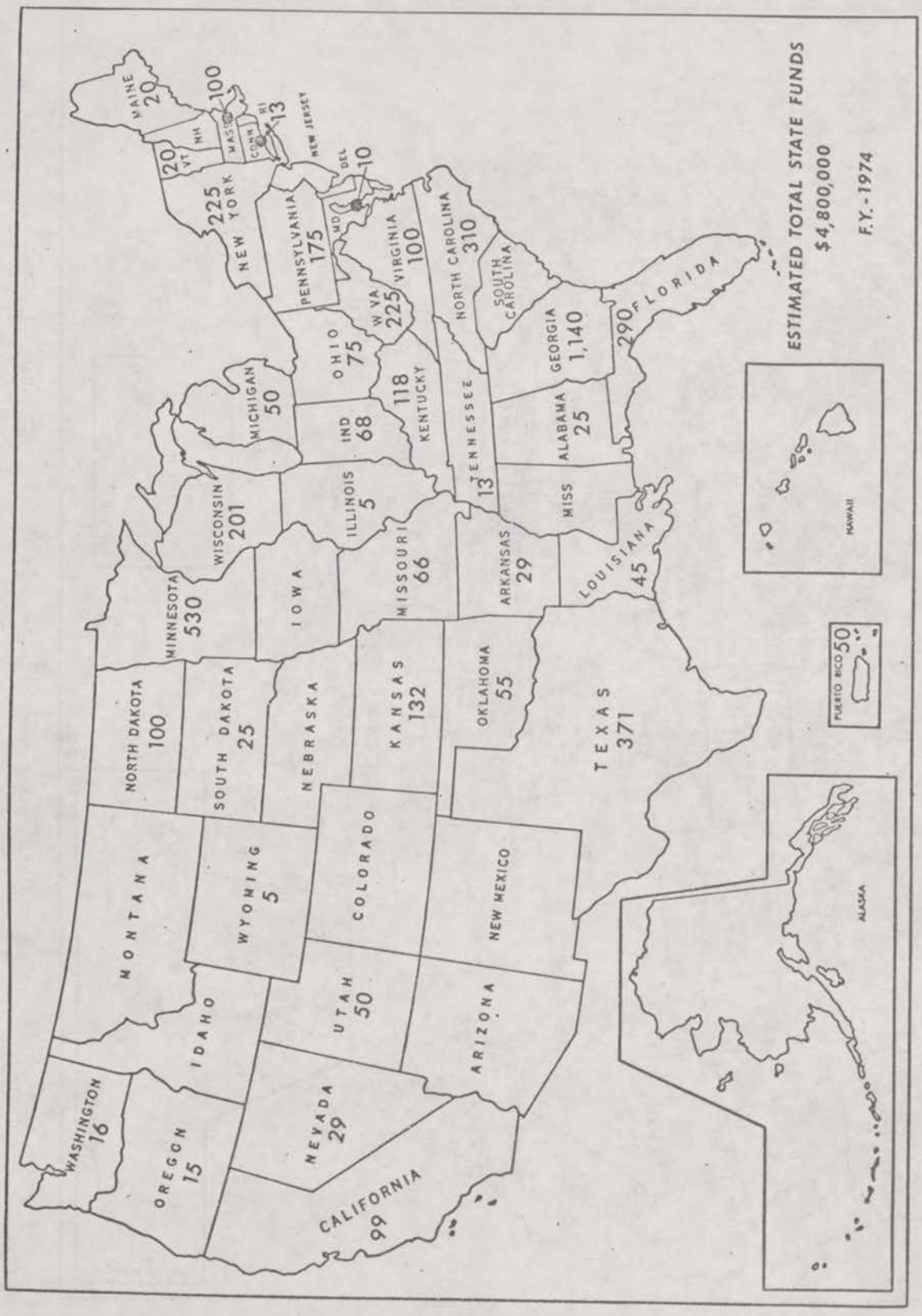

Figure 3 - Cooperative mapping program, FY 1974 (in thousands of dollars)

4. Geologic and Mineral Resource Surveys and Mapping

FY 1974, $46,720,000; FY 1975, $73,090,000; increase $26,370,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+ 4,500,000	+55	$ 4,500,000	55	Environmental geology of onshore energy development
(2) + 2,405,000	+96	11,780,000	259	Consolidation of Seismic and Geomagnetic Observatories program in the Geological Survey
(3) + 500,000	+ 8	2,496,000	58	Coal resource assessment
(4) + 900,000	+13			Coal environmental analysis
(5) + 3,415,000	+55	4,888,000	85	Oil and gas resource investigations onshore
(6) + 600,000	+ 8	1,040,000	20	Oil shale resource investigations
(7) + 2,850,000	+44	4,174,000	75	Uranium/thorium resource assessment
(8) + 1,400,000	+19	1,400,000	19	Energy resources data system
(9) + 500,000	+ 7	1,443,000	38	Energy-related non-fuel mineral investigations
(10) + 1,000,000	--	2,927,000	25	Alaskan mineral resource appraisal
(11) + 3,800,000	--	7,648,000	43	Oil and gas resource investigations offshore
(12) + 1,200,000	+ 7	1,200,000	7	Assessment of energy-related offshore environmental problems
(13) - 150,000	--	--	--	Completion of comparative study of U.S.-Canadian programs to stimulate mineral resource activities
(14) + 484,000	--	--	--	Annualization of October 1973 pay raise
(15) + 2,966,000	--	--	--	Reimbursement for space, services, and facilities provided by GSA in accordance with Public Buildings Amendment of 1972, P.L. 92-313.
$+26,370,000	+312			

Cost Factors Involved in Increase

(1) Fifty-five permanent positions at an average annual rate of $22,000, $1,210,000; travel and transportation, $200,000; supplies and materials, $35,000; equipment, $300,000; research contracts and grants, $1,950,000; data processing and computer use, $250,000; communications, $15,000; drilling, $300,000; helicopter support, $100,000; miscellaneous, $140,000.

(2) Salary and benefits, $1,750,000; travel and transportation, $100,000; supplies and materials, $125,000; equipment, $140,000; research contracts and grants, $50,000; data processing and computer use, $150,000; communications, $25,000; miscellaneous, $65,000.

(3) Eight permanent positions at an average annual rate of $22,000, $176,000; travel and transportation, $50,000; supplies and materials, $5,000; equipment, $50,000; research contracts and grants, $100,000; drilling, $110,000; miscellaneous, $9,000.

(4) Thirteen permanent positions at an average annual rate of $22,000, $285,000; travel and transportation, $40,000; supplies and materials, $5,000; equipment, $50,000; research contracts and grants, $350,000; data processing and computer use, $25,000; communications, $10,000; drilling, $100,000; miscellaneous, $35,000.

(5) Fifty-five permanent positions at an average annual rate of $22,000, $1,210,000; travel and transportation, $225,000; supplies and materials, $35,000; equipment, $500,000; research contracts and grants, $1,200,000; data processing and computer use, $150,000; communications, $30,000; drilling, $50,000; miscellaneous, $15,000.

(6) Eight permanent positions at an average annual rate of $22,000, $176,000; travel and transportation, $35,000; supplies and materials, $30,000; equipment, $100,000; research contracts and grants, $100,000; data processing and computer use, $50,000; drilling, $100,000; miscellaneous, $9,000.

(7) Forty-four permanent positions at an average annual rate of $22,000, $968,000; travel and transportation, $175,000; supplies and materials, $200,000; equipment, $150,000; research contracts and grants, $1,000,000; data processing and computer use, $50,000; drilling, $300,000; miscellaneous, $7,000.

(8) Nineteen permanent positions at an average annual rate of $22,000, $418,000; travel and transportation, $80,000; supplies and materials, $90,000; equipment, $200,000; research contracts and grants, $250,000; data processing and computer use, $300,000; communications, $50,000; miscellaneous, $12,000.

(9) Seven permanent positions at an average annual rate of $22,000,$154,000; travel and transportation, $30,000; supplies and materials, $20,000; equipment, $50,000; research contracts and grants, $75,000; data processing and computer use, $125,000; communications, $20,000; miscellaneous, $26,000.

(10) Acquisition of aeromagnetic data, $250,000; travel and transportation, $125,000; supplies and materials, $25,000; equipment, $75,000; research contracts and grants, $200,000; data processing and computer use, $75,000; helicopter support, $175,000; miscellaneous, $75,000.

(11) Personal services equivalent to 10 man years (made available by part-time employees), $200,000; travel and transportation, $100,000; supplies and materials, $75,000; equipment, $400,000; research contracts and grants, $2,500,000; data processing and computer use, $200,000; ship operations, $300,000; miscellaneous, $25,000.

(12) Seven permanent positions at an average annual rate of $22,000, $154,000; travel and transportation, $20,000; supplies and materials, $150,000; equipment, $150,000; research contracts and grants, $500,000; data processing and computer use, $100,000; ship operations, $100,000; miscellaneous, $26,000.

Analysis by Subactivities

Subactivity	FY 1973 Amount Available	FY 1974 Amount Available	FY 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
(a) Land resource surveys ----	$21,535,115	$25,401,000	$34,168,000	$ + 8,767,000
(b) Mineral resource surveys--	14,485,105	16,405,000	28,737,000	+12,332,000
(c) Offshore geologic surveys-	4,426,238	4,914,000	10,185,000	+ 5,271,000
Total	$40,446,458	$46,720,000	$73,090,000	$ +26,370,000

(a) LAND RESOURCE SURVEYS: FY 1974, $25,401,000; FY 1975, $34,168,000; increase $8,767,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+4,500,000	+55	$4,500,000	55	Environmental geology for energy development
(2) +2,405,000	+96	11,780,000	259	Consolidation of Seismic and Geomagnetic Observatories program in the Geological Survey
(3) + 262,000	--	--	--	Annualization of October 1973 pay raise
(4) +1,600,000	--	--	--	Reimbursement for space, services, and facilities provided by GSA in accordance with Public Building Amendments of 1972, P.L. 92-313
$+8,767,000	+151			

Need for Increase

(1) Environmental geology for energy development--There are many environmental constraints involved in the siting and operation of nuclear reactors. At present, 31 reactors supply about 3 percent of the Nation's electricity, but by 1985, the National Petroleum Council predicts there will be about 300 reactors. With the present 8-year lead time between siting and operation, only 4 years remain to locate the geologically safe reactor sites predicted by 1985. An expanded program in regional geologic hazards mapping; including seismic ground response, active fault mapping, ground subsidence and flood hazard mapping, is needed in areas of critical power demand so that the Geological Survey can make prompt reactor safety reviews and can delineate favorable areas for reactor sites.

(a) The expanding use of nuclear power to generate electricity places a greatly increased demand on our environment to cope with radioactive wastes. The geologic adequacy and integrity of the existing land-fill type of low-level radioactive waste disposal sites must be determined and used to develop geologic and environmental criteria and guidelines for optimum low-level radioactive waste disposal methods. Similarly, various earth materials, such as salt, shale and basalt, must be investigated in selected sites to determine their long term integrity as respositories for high-level radioactive wastes.

(b) Plans for siting a wide variety of energy-related facilities such as conversion plants, pipelines, port facilities, and transmission systems should include consideration of geologic hazards, active geologic processes, and other geologic factors that bear on the capability of the land for specific uses. Wise site selection should minimize construction delays and engineering costs necessary to overcome geologic problems and should minimize negative environmental impacts. By acquiring and translating geologic data into forms and terms readily applicable to planning and to engineering and by determining and analyzing the relative significance of the various geologic factors in siting various types of facilities, guidelines could be developed that would improve planning for facility sites and assessment of their environmental impact.

(c) To relate the changing energy needs of our technological society to an environment that is itself evolving and changing requires dynamic computer modeling to insure the most energy for the least environmental costs. Dynamic modeling will (1) identify geologic factors that may hinder or delay development, (2) analyze and predict the environmental impact of future energy options, (3) identify geologic processes or areas where additional research is required to write or review environmental impact statements, (4) analyze geologic factors of environmental impact resulting from national or local energy policies to determine the full associated environmental costs per energy unit, and (5) to evaluate alternative choices in energy development.

(d) The concentration of waste products from processing billions of tons of coal at relatively few combustion and processing plants will lead to large-scale disturbance of the near-surface environment. Environmental geochemical studies are required to understand the processes by which potentially dangerous elements are dispersed in the environment and to use this knowledge to develop methods that will minimize the adverse geochemical impacts on the environment.

(2) Seismic and Geomagnetic Observatories--On September 16, 1973, the Geological Survey assumed responsibility for seismic and geomagnetic data service programs then operated by National Oceanic and Atmospheric Administration (NOAA), Department of Commerce. This change was made to consolidate in the Geological Survey Federal earthquake research and service programs. These programs provide information necessary for the location of earthquakes, the characterization of geomagnetic parameters used in navigation and communication, and in support of NOAA's tsunami warning system. NOAA continued to fund the data service programs through FY 1974, but in FY 1975 the funds to support this program are being requested by the Geological Survey in conjunction with a decrease in the NOAA budget for this activity.

Program of Work

	FY 1975
Regional Mapping and Analysis	
Eastern States	$1,817,000
Kentucky	743,000
Central States	1,744,000

Program of Work

	FY 1975	
Western States	$1,373,000	
Alaska	664,000	
Paleontology & Stratigraphy	3,260,000	
Geophysical Surveys	2,620,000	
Geochemical Surveys	956,000	
Geochronology	1,071,000	
Geologic Processes	1,170,000	
Land Resource Analysis	591,000	$16,009,000
Earthquake Hazards Reduction		11,780,000
Volcano Hazards		629,000
Engineering Geology		1,250,000
Environmental Aspects of Energy		4,500,000
Total		$34,168,000

Status of Program

(1) The growing and complex demands of modern society on the Nation's valuable land resources require sound land-use planning, resource management, and environmental control. To achieve these important goals, the Geological Survey's nationwide program of geologic investigations and supporting activities and related geophysical and geochemical studies, is directed toward research on pertinent geologic processes, the acquisition of basic earth science data, and the translation and communication of these data in forms that are readily understood and of direct benefit to the widest range of land-use planners and decision makers. Interpretation of the accumulated geologic and associated information provides the means for determining the distribution and properties of surficial materials and rocks that lie on or beneath the earth's surface, evaluating fuel and mineral resources and construction materials, identifying natural hazards such as landslides and active faults, and appraising the suitability of the land for various uses and the cost of modifying it in the construction of roads, buildings, dams, tunnels, pipelines, and other man-made structures.

(2) Geologic maps and related reports resulting from regional mapping and analysis are data banks that store and display in compact form significant information about the land and its resources. The maps are prepared and published at various scales. Large scale maps (1 mile to the inch or larger) for detailed planning and evaluation of land resources are now available for about 25 percent of the country and are produced at the rate of less than 1 percent per year. Maps at smaller scales are also produced, particularly in Alaska where some areas are still virtually unknown geologically. Because of the increasing demand for more extensive coverage, geologic surveys are programmed to make most effective use of available personnel, equipment, and techniques to meet the most urgent needs; for example, greater use of 1:125,000 and 1:250,000 scale maps (2 miles to the inch and 4 miles to the inch) is being made to present geologic data pertinent to regional (as opposed to local) land-use planning and resource management.

(3) Because of the somewhat greater emphasis that has been placed on obtaining adequate surveys and appraisals of the Public Lands, about 70 percent of the total regional mapping and analysis program is in the western states and Alaska. Although these studies were aimed chiefly at facilitating the discovery and evaluation of natural resources for many years, they are now being focused increasingly on environmental problems such as those concerned with the extraction of natural resources and the identification of geologic hazards including earthquakes. Compilations of new or revised state maps of Oregon, Nevada, Wyoming, and Colorado are in various stages of completion.

(4) Geologic mapping in the mid-continent and eastern regions (about 30 percent of total effort) has direct engineering and environmental as well as resource applications. Priorities in these regions are set in considerable part by requests from individual states accompanied by offerings of matching funds. The geologic mapping program in Kentucky, for example, is supported in part by a State appropriation of $500,000. Nearly 85 percent of the State of Kentucky is now mapped in detail at a scale of 2,000 feet to the inch, and the remainder is being completed at the rate of about 2,000 square miles per year. Other areas in which cooperative programs are expected to provide complete geologic mapping coverage at large scale are Massachusetts, Connecticut, and Puerto Rico. Compilation of a new geologic map of Arkansas is continuing.

(5) To ensure the fullest application of earth science information to the planning and decision-making processes, the land resources analysis program was initiated in FY 1973 to determine the most effective methods of presenting integrated geologic, hydrologic, topographic, and geographic data to a broad range of users not trained in earth science. Basic data, special purpose and interpretive maps are being prepared and published in folios that employ a minimum of technical terms and graphic symbols and contain the kinds of information considered to be of greatest value in the solution of land-use and resource management problems. During FY 1973 and FY 1974, an environmental folio was completed for Knox County, Tennessee, and these data are currently being used by the county for land-use planning and resource development. Similar studies are being made in about 25 other areas and complete folios for 12 of these projects will be published by the end of FY 1974. Efforts also began in FY 1974 to apply computer graphics techniques to environmental geologic analysis. During FY 1975, research will continue on displaying data, analyzing data, and producing folios by computer graphics.

(6) The geophysical program consists largely of investigations and interpretations of variations in the earth's magnetic and gravitational fields, although radioactivity, heat flow, electrical properties of the earth, and other physical properties are also studied. Aeromagnetic and gravity data are collected, compiled, and interpreted to define subsurface geologic structure and composition in mineral resource appraisals of Wilderness and other undeveloped Public Lands, in ground water investigations and geothermal appraisals, and for synthesizing the geologic framework of large regions as an aid in geologic mapping and analysis of crustal structure and tectonic history. Ground resistivity, electromagnetic, induced polarization, magnetotelluric, magnetic, self potential, and radioactivity surveys supplement the aeromagnetic and gravity data. Small aircraft are used for gathering detailed aeromagnetic data; for development of airborne spectral radiation (U, Th, K^{40}) and electromagnetic mapping and prospecting systems; and for development of systems for the detection of pollution for Hg, SO_2, NO_2, Br, and F. Studies in airborne infrared microwave thermal emission, and multispectral reflectance over chemically stressed, volcanic, geothermal, and urban areas are also carried out.

(7) Continuing paleomagnetic investigations are aiding in the interpretation of past changes in the earth's magnetic field and movements of major crustal plates. Studies are conducted on the rates of flow of heat from the earth's interior and on the physical properties of rocks at high pressures and temperatures, factors that are essential to the understanding of earthquakes, volcanoes, geothermal areas, and other geologic phenomena of potential destructiveness or usefulness.

(8) Fundamental geochemical properties and processes of the earth's crust are investigated in the field and laboratory. These investigations furnish essential information on the origin of important rock types, their chemistry, distribution, and relationships in time and space. Complex rocks that are the product of processes deep within the crust are investigated in selected areas throughout the country. The chemical reaction between rocks and ground water that take place at relatively shallow depth are also of special concern, and the complex chemical

relations between the two are currently being studied. The published results of these investigations serve as reliable guides to geologists in government, industry, and the academic community who are seeking to evaluate resource and land-use potentials.

(9) The ages of rocks, ores, and waters are obtained by various isotopic methods, and new instruments have been developed for neutron activation logging down boreholes and in waters. Regional geochemical studies examine the distribution and variation of metals and related elements in rocks, soils, vegetation, and waters. A detailed geochemical study for the entire state of Missouri, in cooperation with epidemiologists at the University of Missouri, is now complete and shows that the great diversity of natural materials in the state can be classified into eight geochemically distinct units. The sampling designs developed during this study are to be applied in further geochemical surveys which will provide baseline geochemical data for measurements of pollution or other environmental disturbances.

(10) Earthquake Hazards Reduction--Earthquakes constitute a serious threat to many parts of the United States and potentially are the most destructive of all natural disasters. A great earthquake (magnitude 8 or larger) in or near a major urban area of the Pacific Coast, for example, could cause the death of tens of thousands, damage in the range of 5 to 20 billion dollars, and disruption of the economy of a major segment of the nation. Smaller shocks, which occur with greater frequency, also are capable of causing serious damage and loss of life, as evidenced by the 1971 San Fernando earthquake. The possibility of destructive earthquakes exists for many areas in addition to the Pacific Coast. Notable earthquakes have occurred at New Madrid, Missouri (1811-12), Boston (1755), and Charleston, South Carolina (1866), and in Utah, Nevada, and Montana.

(11) Losses from earthquakes can be greatly reduced by wise use of land and by proper engineering design and construction. The Survey's earthquake investigations are directed toward providing the information necessary for implementation of these measures. A comprehensive program of basic and applied research that spans seismology, geology, geophysics, and soils engineering has been underway since 1965 when the Survey began intensified earthquake research. Federal earthquake research and data services were consolidated in the U.S. Geological Survey when the Survey assumed responsibility for the earthquake programs of National Oceanic and Atmospheric Administration in 1973. This consolidation gives the U.S. Geological Survey leadership responsibility for the expanded Federal program in earthquake hazards reduction. The program involves a highly competent team of scientists and engineers in a closely coordinated effort to better understand earthquakes and to discover how their effects can be mitigated. The studies include analysis of the geology of tectonically active regions and of fault zones; recording, processing, and evaluation of seismic data; investigation of the physical bases for earthquakes; development of the capability for forecasting the time, place, and magnitudes of earthquakes; delineation of earthquake hazard zones; and research in earthquake engineering. In order to apply the expertise in earthquake studies that exists outside of the Federal Government toward helping reduce earthquake hazards, a grants program to universities, state governmental agencies, and industry has been established.

(12) Seismic data from fourteen seismological and geomagnetic observatories, together with those from the 31 domestic stations of the World-Wide Standardized Seismic Network, permit accurate location of earthquake hypocenters and provide ground motion records. Through the National Earthquake Information Center, reports of significant earthquakes within the United States and elsewhere in the world are provided rapidly to Federal and State agencies responsible for disaster relief, to the scientific community, and to the public. Seismic data are accumulated, compiled, and made available in support of studies of earthquake occurrence and seismic

engineering. Geomagnetic characteristics which are important for navigation and communication as well as for fundamental studies of the dynamic behavior of the earth, are analyzed and disseminated. Several of the observatories operate in direct support of the Tsunami Warning System, which warns of the danger of potentially destructive water waves generated by major earthquakes near or under the ocean.

(13) Prototype geological and geophysical studies of the San Andreas fault system, involving establishment of seismograph station networks, monitoring of crustal strains, and delineation of earthquake hazard zones, have been expanded. Continued development of techniques and advanced instrumentation for analyzing crustal strains indicate that prediction of time and place of earthquake occurrence will be feasible. Similar investigations have been started in other highly seismic regions of the United States, with the highest priority given to densely populated areas that face the greatest risk from damaging earthquakes. Program emphasis is on urban areas of coastal southern California, the San Francisco Bay Region, Seattle, Salt Lake City, and the coastal communities of Alaska. A detailed investigation of the seismicity of the Charleston, South Carolina region was begun that has profound implications for the safe engineering of structures throughout the East Coast.

(14) The current earthquake hazards reduction program consists of the following main elements:

(a) Earthquake hazards mapping and risk analysis--identification and delineation of areas subject to surface faulting, strong ground motion, ground failure (including landsliding, liquefaction, and differential settlement), tectonic elevation changes, and water-related effects (including flooding, tsunamis, and seiches); estimation of earthquake magnitude and frequency for specific regions; calculation of expected bedrock ground motions; development of techniques that present hazards data to engineers and planners in easily-used forms.

(b) Fault mapping--delineation of active faults and estimation of history of fault movement and earthquake recurrence intervals.

(c) Earthquake prediction--evaluation of fault movement and strain in crustal blocks adjacent to the faults; evaluation of stress in rocks; detection and measurement of premonitory indications of earthquake occurrence, including ground tilting, electromagnetic anomalies and seismicity; automation of earthquake data processing.

(d) Earthquake control--determination of chemical and physical properties of fault zone materials; measurement of fluid pressures and their influence on earthquake occurrence; computation of realistic models of the earthquake process; evaluation of possible sites for field tests.

(e) Post-earthquake studies--determination of detailed after-shock distribution; delineation of surface faulting, earthquake-induced landslides and areas of liquefaction and/or differential settlement; determination of crustal strains by geodetic methods; preparation of seismic intensity maps; analysis of damage with respect to geologic foundation materials; evaluation of the economic consequences of earthquakes.

(15) Volcano hazards pose potential threats in many areas near active or temporarily dormant volcanoes. A system of prediction is essential to mitigate these hazards. The major program effort is carried on at the Hawaiian Volcano Observatory, where long-term monitoring has provided advanced warning to the more than 35,000 people who live downslope of potentially active eruptive vents on

Kilauea and Mauna Loa volcanoes. Progress has continued to be made in the monitoring networks and our understanding of the underground "plumbing" of Kilauea; the seismic network has been expanded and is almost completely converted to radiotelemetry; the ground deformation network, which monitors the swelling of the volcano as lava forces its way upward prior to eruption, has also been enlarged. In collaboration with HUD, a volcano hazards study of the entire island of Hawaii has been completed, and a draft report and an accompanying map outlining areas of relative danger posed by volcanic eruptions have been delivered to HUD. This material will be of value to HUD in establishing areas that will be withdrawn from FHA loan participation, and it will also be of use to officials and citizens of the County of Hawaii concerned with land-use policy. In the Cascade Range of the Pacific Northwest, volcano hazards studies are continuing on Mt. Saint Helens and Mt. Shasta. A program of volcano surveillance has been initiated, in which seismicity, ground deformation, and temperature will be monitored. In collaboration with NASA, and as part of the ERTS-A experiments, seismic event counters, borehole tiltmeters, and thermistor arrays have been placed on Lassen Peak, Mt. Saint Helens, and Baker Peak. This surveillance marks the first important step toward developing an operational volcano warning system that eventually will indicate which, if any, of the Cascade volcanoes are showing signs of returning to activity.

(16) The Engineering Geology program has at its core detailed geologic studies in urban areas that provides information on foundation conditions, slope stability and landslide potential, drainage characteristics, and engineering properties of rocks and soils. Such studies are continuing in Los Angeles, San Francisco, Denver, Salt Lake City, Rapid City, Boston, Anchorage, and Juneau. In addition, longer range research in engineering geologic problems is conducted in both the field and laboratory. In the laboratory at Menlo Park, California, ground motion studies of unconsolidated materials are being done in order to better predict the effects of earthquakes in areas of differing geologic conditions. In the Denver area research in rock mechanics includes observations in mines and tunnels as well as laboratory investigations. This work is directed toward a fuller understanding of the conditions that lead to rock failure during engineering modification, such as the triggering of landslides during construction and the causing of rock bursts and collapses during tunnelling and mining. In conjunction with urban area studies, such as in the San Francisco Bay and Denver areas, and in the land resource analysis program, engineering geologic maps and analyses are being further interpreted and synthesized with data from other disciplines for application in regional and urban land-use planning.

(b) MINERAL RESOURCE SURVEYS: FY 1974, $16,405,000; FY 1975, $28,737,000; increase, $12,332,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+ 500,000	+8	$2,496,000	58	Coal resource assessment
(2)	+ 900,000	+13			Coal environmental analysis
(3)	+3,415,000	+55	4,888,000	85	Oil and gas resource investigations onshore
(4)	+ 600,000	+8	1,040,000	20	Oil shale resource investigations
(5)	+2,850,000	+44	4,174,000	75	Uranium/thorium resource assessment
(6)	+1,400,000	+19	1,400,000	19	Energy resources data system
(7)	+ 500,000	+7	1,443,000	38	Energy-related non-fuel mineral investigations
(8)	+1,000,000	--	2,927,000	25	Alaskan mineral resource appraisal
(9)	- 150,000	--	--	--	Completion of comparative study of U.S.-Canadian programs to stimulate mineral resource activities
(10)	+ 185,000	--	--	--	Annualization of October 1973 pay raise
(11)	+1,132,000	--	--	--	Reimbursement for space, services, and facilities provided by GSA in accordance with Public Buildings Amendments of 1972, P.L. 92-313
	$+12,332,000	+154			

Need for Increase

(1) Coal Resource Assessment--Existing knowledge of the coal resources and reserves of the Nation is grossly inadequate. Present data are based largely on resources studies carried from 1890 to 1950 and they are not sufficiently comprehensive to enable precise location of many coal deposits, nor to provide accurate information on the chemical and physical properties of those deposits whose locations are known. The proposed increase is needed to update and expand our knowledge of the Nation's coal resource base. Modern industry's power generating, gasification, liquefaction, and metallurgical efforts require increasingly more sophisticated and accurate data on coal resources to locate, quantify, and qualify adequate tonnage to justify long term investment. To fill this requirement and to meet responsibilities for planning, managing, maintaining environmental standards, and setting future energy priorities, the Federal Government must greatly increase its coal resource assessment program.

(2) Coal Environmental Analysis-- Extensive strip mining, coal burning, and ash disposal planned in the western coal regions require that the environmental impacts are understood and controlled to a level that is acceptable. Geologic and geochemical studies are an integral and indispensable part of environmental impact studies. They provide data, methods, and models to mitigate the impact of development and to plan and monitor reclamation efforts.

With the proposed increase, studies of erosion and sedimentation mechanisms in a broad range of geologic, physiographic, and climatic areas will be initiated to predict and control the effects of mining and reclamation on these natural processes and to lessen the impact of erosion in mined areas. The chemical and physical by-products of weathering and the weathering rates of overburden and spoil must be known for effective chemical restoration of the soil and successful revegetation. Data will be coordinated on the chemical and physical properties of mine waste with engineering geologic analysis of regional land stability to develop improved methods of mine waste disposal. The increase will enable the Geological Survey to begin environmental geologic research now and keep pace with coal development so that effective reclamation will become a part of the mining plans and orphaned derelict land will be avoided.

(3) Onshore Oil and Gas Resource Investigations--Studies suggest that significant quantities of additional petroleum remain to be discovered in this country but their discovery will be difficult and expensive. Part of the difficulty stems from inadequate information. The proposed increase will enable the Geological Survey to develop information leading to expanded exploration possibilities. The history of oil exploration shows that 70 percent of all exploratory wells drilled in the U.S. were drilled by the small operators (independents), but that they have discovered only 50 percent of the oil. As the difficulty level of exploration increases, so will the cost of exploration, thus potentially cutting out the independent--the most active oil explorer. The Geological Survey's program will provide the research component needed to support the more difficult exploration activities of the future.

(4) Oil Shale Resource Investigations--Approximately 80 percent of the vast Colorado, Utah and Wyoming oil shale resources is located on Federal lands on which the Department of the Interior has managerial responsibilities. To manage these lands properly and to foster orderly development of their resources, a far more precise knowledge of the distribution, quantity, and grade of the oil shales is needed as is the distribution and content of their contained chemical trace elements and associated sodium-aluminum minerals. In the mining or processing of oil shale, escaping chemical trace elements could prove deleterious to the environment, and the associated sodium-aluminum minerals, which are potentially valuable by-products, could be irretrievably lost. The proposed increase provides for a comprehensive appraisal of all oil shale resources in this region through geologic mapping and mineralogic and chemical studies to guide the Department of the Interior in the selection of future oil shale lease tracts, in mining or extraction research programs, in land management and classification, and in land exchanges with industry. The results will also be a guide to the best areas for producing the oil, and will contribute to a final decision as to whether in-situ retorting or conventional mining and surface retorting is the most efficient and least hazardous way to extract the oil from the shale.

(5) Uranium/Thorium Resource Assessment--An increase in exploratory effort in the search for nuclear fuels is necessary to meet the projected future demands of even the most conservative estimates. By the mid-1980's present resources will be depleted, and, because of the lead time required in advance of production and utilization, exploration for new deposits of uranium and thorium must be greatly accelerated. The proposed increase is specifically aimed at immediate expansion

of exploratory efforts. Nuclear fuel is presently used to generate about 3 percent of the Nation's electricity--by the year 2000, there are predictions that the level of use will increase to 60 percent. The amount of high-grade uranium ore required translates into almost a 10-fold expansion of the Nation's present reserves of 270,000 tons. To acquire the present tonnage has taken about 25 years of exploration, and through many of those years the intensity of exploration was at a level far greater than the present. The proposed program of exploration research and uranium resource assessment is designed to develop new and more sophisticated exploration techniques as aids to the mining industry and as a mechanism for stimulating the search for new uranium and thorium deposits throughout many untested areas of the United States.

(6) Energy Resources Data System--At a time when fundamental questions relating to energy supply and demand require answers, the Government lacks an adequate comprehensive data storage and retrieval system with which to provide credible response. This inadequacy becomes more apparent daily as the pace of energy-related political, social, and industrial activities quickens, and demands not just answers to resource questions, but accurate and immediate answers. A sound energy data base is vital as the Nation plans for an accelerated exploration program, and ready access to the data is critical to plan modern resource studies and to support and guide related industrial activities. Further, a system must be developed that will insure compatibility of various resource data collections to provide comprehensiveness and avoid costly duplication. The proposed increase will assure a start toward achieving these goals by allowing the development of a system that will provide (1) a data base for resource policy determination; (2) an exploration aid for targeted commodities as well as for general reserve development; and (3) statistical studies leading to prediction of resource capabilities and econometric evaluations.

(7) Energy-Related Non-fuel Minerals--Both the production and use of organic and nuclear fuels will require continuing adequate supplies of a variety of non-fuel supportive minerals that play little-known but essential roles in energy production to meet minimum anticipated non-energy related needs. Only about a third of these elements are known to be readily available domestically in adequate supply. When possible new energy-related requirements are added to anticipated conventional uses, nearly all of the energy-supportive elements are in potentially short supply for any period beyond the short-term. Additional effort in mineral resource assessment is required to determine as accurately as possible the anticipated needs for support of changing and alternative energy sources, to appraise the ability of domestic mineral resources to meet these needs and to improve our ability to discover minerals for which the need will be most critical.

(8) Because of the diminishing reserves of presently known sources of domestic raw materials, an urgent need exists to appraise the potential raw material resource base in Alaska. Based on preliminary studies, the mineral resource potential for Alaska, although largely unevaluated, is expected to supply much of the future needs for domestic raw materials. Because of the Nation's growing resource requirements, there is an immediate need for a more detailed appraisal of the resource potential and identification of viable targets for land and mineral planning, and to encourage exploration. The increase of $1,000,000 requested will be matched by $1,000,000 in funds redirected from the "lower 48" to Alaska work, resulting in a much strengthened program.

The appraisal of mineral resources will be based on modern techniques of analyzing available information and field investigations of geology, geochemistry, and geophysics, and studies of mineral deposits in areas where available information is inadequate. Experience to date has shown that such information and analysis are essential to minimize potential conflicts and to allow for effective planning for future resource needs of the Nation as well as the State of Alaska.

Program of Work

	FY 1975	
Energy investigations:		
Coal	$ 2,496,000	
Oil & Gas	4,888,000	
Oil Shale	1,040,000	
Uranium/thorium	4,174,000	
Energy Resources Data System	1,400,000	$13,998,000
Mineral investigations:		
Metallic minerals	$ 6,433,000	
Non-metallic minerals	889,000	
Geochemistry of ore deposits	2,323,000	
Exploration research	2,406,000	
Mineral resource appraisal	1,443,000	13,494,000
Wilderness investigations		1,245,000
Total		$28,737,000

Status of Program

(1) A broad spectrum of scientific investigations, which comprise the mineral resource surveys program, is required to support national mineral raw material supply and management decisions. This program includes studies of the origin, occurrence, magnitude, and quality of energy and metallic and non-metallic deposits. New concepts and techniques of mineral exploration are being developed and evaluated, and appraisal of the Nation's mineral resources continues.

(2) A bountiful supply of energy resources--oil, gas, coal, and uranium--is the natural foundation on which the great industrial productivity and high living standard of the United States were built and are maintained. Conspicuous strains in this supply have resulted from the relatively advanced state of development of our resources coupled with rapid increases in per capita consumption and population. Environmental considerations and an adverse balance of trade in minerals worsen the strain and complicate policy choices. If energy consumption is to double during the next 20 years, as all projections show, the rates of discovery and production of domestic energy raw materials will have to increase dramatically to avoid greatly increased dependence on imports of crude oil and liquified natural gas from foreign sources. The current energy resource program of the Geological Survey is addressed to these needs.

(3) Continental shelf exploration for new oil and gas deposits will play a key role in holding down the level of U.S. dependence on hydrocarbon imports. Reconnaissance investigations of the geology of selected parts of the shelves are underway in four major areas considered to hold promise for future petroleum prospects. Additionally, research investigations have been undertaken to develop new and improved methods and instruments for exploring hydrocarbons in excessive water depths characteristic of the continental slope and rise where it is anticipated that many of our longer-term energy requirements will have to be satisfied. These aspects of our energy investigations are important parts of the Offshore Geological Surveys subactivity and are described more fully there.

(4) Although newly found oil and gas from the outer continental shelves will play an ever increasing role, the mainstay of domestic hydrocarbon production will continue for many years to come from onshore production in the "lower 48" and Alaska. New discoveries of deeper and/or harder-to-find (and generally smaller) oil traps will supplement continued production from old fields, much of it obtained by refinements in secondary recovery technology. Program emphasis pertaining to

onshore oil and gas is highly selective. An experimental effort to investigate methods of prospecting for stratigraphic and other subtle traps without dependence solely on geophysical and subsurface structure mapping has been launched. Investigations of novel logging methods for searching for bypassed hydrocarbons in developed fields continue with noteworthy success. Basic research into mass properties of sedimentary rocks is being supplemented by investigations of reservoir rock porosity and permeability relationships to problems of estimation of reserves and recovery efficiency. Systematic mapping (surface, subsurface, or geophysical) of a few specially selected local areas favorable for further prospect drilling, especially for gas, continues.

(5) In terms of long-range importance to the nation, most coal reserves contain sufficient sulfur to be environmentally objectionable or unacceptable for many current needs, and shortages of low-sulfur and special purpose coals exist or can be foreseen, especially in the east and southeast. Program emphasis is particularly on improving knowledge of the reserves and resources of low-sulfur coal, and on research aimed at clarifying the relationships between sulfur contents of coals and geologic characteristics of the rocks closely associated with them. Trace elements distributions in coals have also received increased attention because of problems of atmospheric pollution caused by some toxic metals released during coal utilization.

(6) Looking toward rapid increases in production and consumption of uranium as an alternative source of energy to replace scarce hydrocarbons for the large scale production of electrical power, systematic mapping of uranium bearing rocks is being continued at a fairly high level for purposes of improving knowledge of the resource base. Special studies of local deposits are aimed at better understanding of processes of ore formation and improving exploratory techniques.

(7) In the next decade, the Nation's requirements for metallic and non-metallic raw material commodities are projected to increase enormously. The program emphasis is placed on those mineral commodities for which shortages exist or are anticipated, and for which the application of geologic knowledge may be expected to result in new domestic discoveries, and ultimately in increased domestic production. Indications of the occurrence of buried mineral deposits are few and not easily recognized; the search for new deposits, therefore, must be based increasingly on the coordinated application of geology, geochemistry, and geophysics. The Geological Survey program is geographically broad-based. Active field projects in more than half of the states and Puerto Rico are focused on detailed mapping, sampling, and analysis of base, ferrous, and precious metal deposits. Regional geologic, geophysical, and geochemical examinations of broad regions (scale 1:250,000) of potential mineralization are underway in both the mountainous west and the urbanized east. Comparable studies are focused on the non-metallic and industrial mineral commodities from saline minerals in California to fluorspar in Illinois and clays in the southeast. Similar programs yielding information about foreign mineral resources are supported through other agencies, such as AID. The results of research projects such as those underway were reported in some of the 129 book reports and 347 geologic maps published by the Geological Survey in FY 1973.

(8) Investigations of the geochemistry and geophysics of ore deposits provide information that is basic to improving the efficiency and effectiveness of the search for new ore deposits. Geochemical investigations include detailed studies and sample analysis of selected ore deposits and areas in which ore deposits occur, identification and examination of minerals and phase relations to determine their significance as indicators of past conditions, and development and testing of new methods of chemical assay and analysis. Steady progress is being made in deducing the origin of waters and ore fluids from the chemical and isotopic compositions of

minerals and fluid inclusions, and this fundamental work is increasing our understanding of ore-forming processes markedly, as well as enhancing our ability to predict ore occurrences. The urgent need for compilation and critical evaluation of thermochemical data for minerals and dissolved chemical species was revealed by a program for computer-modeling of the ore-forming environment. Early results have produced much improved precision of geochemical modeling in specific instances, and further efforts to broaden our predictive capabilities for the occurrence of mineral resources are continuing. Geophysical investigations have centered on the construction and testing of electromagnetic equipment and the development of geophysical instruments and interpretation methods. The use of gravity methods in wilderness area studies has proved a valuable support to the information gathered by aeromagnetic methods.

(9) The exploration research program uses laboratory-and field-derived geologic, geochemical, and geophysical concepts and data to develop and field-test new mineral-finding techniques. Programs are continuing in the study of the distribution and abundance of pathfinder elements or suites of elements in and around mineral districts. These elements occur in a variety of host rocks and climatic belts. Projects are also continuing to detect geochemical anomalies by remote sensing techniques, to improve analytical techniques for field and laboratory, and to utilize computer methods to analyze large amounts of chemical and geophysical data. Previously overlooked clues to buried deposits are appearing in patterns of element distribution and redistribution around many types of ore deposits. The search continues to refine these clues and the types of deposits for which these are indirect indicators. Studies also are continuing to determine whether such geochemical data can be applied to determining not only the presence of a deposit, but also the depth of burial.

(10) The mineral resources appraisal program now in progress places emphasis on assessment and interpretation of mineral resource data. The program will provide a firmer basis for future decision making by the Government on questions of mineral supply, land use, and environmental policies. Appraisal of the potential mineral resources of selected urban areas and other Federal and private land areas not included in the Wilderness Act Program is underway. A mineral resource computer data bank is operational and is assisting many individual mineral resource appraisal projects. The Office of Resource Analysis is now combining the expertise of advanced mineral economic theory with old and new statistical and computer techniques to provide support for exploration activities as well as increasing the quality and speed of land appraisal for potential mineral resources.

(11) Geological Survey and Bureau of Mines joint wilderness investigations under the authority of the Wilderness Act of 1964 (P.L. 88-577) have resulted in mineral surveys of all 34 primitive areas and 29 of 235 known wilderness candidate areas, which the Department of Agriculture recommends be included in the National Wilderness Preservation System and of 12 of the 54 Wilderness areas already in the system. Currently the candidate wilderness areas comprise more than 13 million acres of Forest Service lands, which does not include numerous areas continually being recommended for the Wilderness System by members of Congress. Mineral Resources study of these areas must be completed within the next 9 years.

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(c) OFFSHORE GEOLOGIC SURVEYS: FY 1974, $4,914,000; FY 1975, $10,185,000; increase, $5,271,000 The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+ 3,800,000	--	$ 7,648,000	43	Oil and gas resource investigations offshore
(2)	+ 1,200,000	+7	1,200,000	7	Assessment of energy-related offshore environmental problems
(3)	+ 37,000	--	--	--	Annualization of October 1973 pay raise
(4)	+ 234,000	--	--	--	Reimbursement for space, services, and facilities provided by GSA in accordance with Public Buildings Amendments of 1972, P.L. 92-313
	$+ 5,271,000	+7			

Need for Increase

To support the expanded offshore near-term oil and gas leasing program called for by the President in his April 18, 1973 Energy Message, the Geological Survey must accelerate the systematic resource and environmental surveys on the Outer Continental Shelf (OCS). Because the OCS activities are so complex and equipment lead times so long, the most important role for Government in the OCS is to provide information that will permit its orderly development. False starts, delays, and uncertainties result in enormous additional costs. Events of the past year with respect to petroleum activities make it incumbent upon Government to develop independent data to use in the management of public lands.

(1) Oil and Gas Resource Appraisal--A two-phase program of area and tract selection involving geophysical and geological data-gathering and analysis is underway on the entire OCS from Maine to Alaska. With the proposed increase, the program will be accelerated and concentrated in specific areas to guide and support leasing schedules. Though the OCS is thought to be an extremely rich hunting ground for petroleum and natural gas, there is no doubt that certain areas have significantly higher potential than others, and it is the role of the Geological Survey to aid in directing the limited exploration resources into the most favorable areas. As exploration of the OCS extends into ever-more remote areas, the need for the Federal Government to have a strong independent opinion to adjudicate between conflicting interests also becomes increasingly vital.

(2) Energy related environmental investigations--The increase is necessary to support the collection and evaluation of critical environmental data in areas that are scheduled for accelerated offshore leasing in response to the President's initiative. Environmental evaluation is part of the necessary data to support orderly OCS development activities. For adequate evaluation, years of lead time in data gathering are required because environments are dynamic and change with the seasons and the years. Adequate evaluation is essential in order to preclude damage to the marine environment and to protect the highly urbanized and exceedingly valuable marine coast lines. The role of the Geological Survey is to supply a research component to environmental studies and to aid in the scientific management of environmental assessments leading to possible OCS developments. Environmental

studies must proceed in tandem with resource appraisal if the country is to avoid the unacceptable situation of the solution to the energy shortage becoming the problem of the natural environment.

Program of Work

	FY 1975
Oil and gas resource appraisal	$ 7,648,000
Energy related environmental investigations	1,200,000
Marine Geology investigations	1,337,000
Total	$10,185,000

Status of Program

The continental shelf mapping program is here summarized by major geographic areas.

Atlantic Continental Margin--An intensive effort began on January 1972 to study systematically, through analysis and interpretation of substantial amounts of proprietary geophysical data, the structure, stratigraphy, and resource potential of that part of the Atlantic Shelf between Canadian waters and Cape Hatteras. This preliminary study is expected to be complete by February 1974, and rests on a foundation of experience and knowledge gained during ten years of reconnaissance studies along the entire Atlantic Shelf and on a much longer history of geologic work on the exposed rocks of the Atlantic Coastal Plain. Present results reveal a much more extensive, involved, and longer sedimentary history for portions of the offshore shelf than one could have guessed from previously available data, and consequently a greater and more promising oil and gas potential than hitherto realized.

Collection and analysis of detailed structural and stratigraphic data are being continued in selected areas where such data are required to identify environmental problems related to deepwater port and nuclear power plant siting.

Gulf of Mexico and Caribbean--Compilation of all basic data and geologic interpretations for the entire Gulf of Mexico basin have been completed at a scale of 1:2,500,000, and a multidisciplinary report prepared for publication. Emphasis has been on broad structural characteristics and the petroleum resource potential, including that in the deep water portions of the basin. Cooperative studies with the Commonwealth of Puerto Rico continue and are being intensified. Those studies combine research and systematic mapping, resource evaluation, and training.

Pacific Continental Margin--Four major and diverse programs continue along the Pacific Shelf. On the Southern California Borderland, ongoing work related to the Geological Survey's earthquake program is aimed at better understanding of the near-coastal offshore regional geology to identify zones of active faulting and to evaluate earthquake frequency and magnitude risks relative to the siting of nuclear power generating plants. In a larger part of the same area, systematic regional geologic mapping has been accelerated for purposes of providing a firmer basis for evaluating the petroleum resource potential of a highly prospective but geologically extremely diversified region from Pt. Concepcion south to the Mexican border. This regional study and evaluation is not restricted to areas accessible through current exploration and drilling technology. It covers the entire Borderland, including the basins, some of which are under more than 6,000 feet of water, and some of which are likely to contain hydrocarbon resources that will be accessible technologically in the future. Large-scale geologic mapping and selected topical investigations of San Francisco Bay continue. New insights have been gained into trace-element contaminant distributions by fine sediment particle dispersal as an unexpected by-product of the estuarine circulation and flushing studies. In the

central California Shelf region, efforts continue to locate and map possibly active faults and potentially unstable sea floor sediments, as well as systematic geologic mapping for purposes of resource appraisal. A program of geologic and geophysical mapping in the Straits of Juan de Fuca (in part conducted with informal cooperation with Canadian earth scientists) provided new knowledge of the structural and stratigraphic complexities north of the Olympic Peninsula.

Alaska Continental Margin--Reconnaissance investigations in the western Gulf of Alaska are being closely coordinated with resource appraisal studies (farther east and south) carried on by the Conservation Division. Emphasis is on structural investigations appropriate for better understanding of the petroleum resource potential and on improved understanding of seismic activity and attendant hazards in offshore operations. Broad reconnaissance investigations in the Chukchi and Beaufort Seas done in cooperation with the Coast Guard (ice breakers) continue geophysical data of considerable value in these operationally difficult shelf areas of high petroleum resource potential.

5. Minerals Discovery Loan Program

FY 1974, $291,000; FY 1975, $198,000; decrease, $93,000. The decrease consists of:

Increase (+) or Decrease (-)		Total	Total	
Amount	Positions	Program	Positions	Explanation
$-93,000	-1	$198,000	8	Reduction of loan program.

Status of Program

Financial assistance to explore deposits of 36 eligible minerals has been offered on a participating basis to private industry by the Office of Minerals Exploration (OME). Under the current level, $291,000 is received to support loans and to administer exploration contracts provided to those who are unable to borrow the necessary funds at reasonable terms from commercial sources. The program involves processing applications, conducting geologic and engineering field examinations, preparing and monitoring contracts, and collecting royalties on production. OME also administers contracts with royalty obligations remaining from a similar program conducted by the former Defense Minerals Exploration Administration (DMEA). The net decrease in funds in FY 1975 is a reduction of the amount of money available for loans with the result that all monies will be used in the various administrative and monitoring activities of the program.

Minerals Discovery Loan Program

	FY 1973 Amount Available	FY 1974 Amount Available	FY 1975 Estimate	Decrease (-) 1975 Compared with 1974
(a) Financial assistance	$ 247,853	$121,232	$ 5,000	$ -116,232
(b) Technical and administrative expense	198,000	212,000	198,000	-14,000
Total obligations	$ 445,853	$333,232	$203,000	$ -130,232
Financing:				
Unobligated balance available, start of year	164,541	-	-	-
Recovery of prior year obligations 1/	4,312	42,232	5,000	-37,232
Budget authority	277,000	291,000	198,000	-93,000
Total amount	$ 445,853	$333,232	$203,000	$ -130,232

1/ Funds returned (estimated for 1974 and 1975) because contracts were terminated or not completed.

6. Water Resources Investigations

FY 1974, $45,480,000; FY 1975, $53,349,000; Increase, $7,869,000
The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
+ $1,800,000	+35	$21,059,481	642	Provide water data in which Federal interest is paramount.
- 887,000	-35	--	--	Transfer funds and personal services to baseline water-quality data program of higher priority.
+ 3,958,000	--	--	--	Reimbursement for space, services and facilities provided by GSA in accordance with Public Building Amendments of 1972, P.L. 92-313.
+ 33,000	--	--	--	Reimbursement to Bureau of Employees Compensation.
+ 2,500,000	+43	--	--	Accelerated Energy Research and Development Program.
+ 465,000	--	--	--	Annualization of October 1973 pay raise.
+ $7,869,000	+ 43			

Cost Factors Involved in Increase

Forty-three positions at an average salary of $17,600, ($756,800); transportation and subsistence, $195,000; supplies and materials, $268,200; contractural services, $1,650,000; equipment, $543,000; and rents, $3,958,000.

The Water Resources program of the Geological Survey proposed for 1975 will require direct appropriations of $53,349,000 (55% of total program). In addition, the Survey performs extensive water-data acquisition for other Federal agencies under a reimbursable arrangement ($17,090,000; 17% of total program), and receives fiscal support from the States through the Federal-State program of cooperative work ($27,100,000; 28% of total program), making a total projected program of $97,539,000 for 1975.

Analysis by Subactivities

Subactivity	FY 1973 Amount Available	FY 1974 Amount Available	FY 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
A. National Water Data System:				
(1) Federal Program.....	$16,333,952	$17,090,481	$21,059,481	+ $3,969,000
(2) Federal-State Program.....	21,189,128	25,371,000	26,483,000[a/]	+ 1,112,000
B. Critical National Water Problems.....	2,661,860	2,648,000	5,403,000	+ 2,755,000
C. Employee Compensation Payments.....	345,157	370,519	403,519	+ 33,000
TOTAL.....	$40,530,097	$45,480,000	$53,349,000	+ $7,869,000

a/ Includes $383,000 for administration of the cooperative program and $26,100,000 for matching State offerings.

A. National Water Data System

The National Water Data System embraces the total effort of government (Federal, State, local) to acquire, process, store and disseminate water-resources and water-use information. The Geological Survey is the principal Federal water-data agency. As such, its programs constitute a major part of the system.

(1) FEDERAL PROGRAM: FY 1974, $17,090,481; FY 1975, $21,059,481; Increase, $3,969,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
+ $1,800,000	+35	$ 3,226,000	64	Increase the collection of baseline water-quality data.
- 734,000	-29	--	--	Transfer funds and personal services to baseline water quality data program of higher priority.
+ $2,727,000	--	--	--	Reimbursement for space, services and facilities provided by GSA in accordance with Public Buildings Amendments of 1972, P.L. 92-313.
+ 176,000	--	--	--	Annualization of October 1973 pay raise
+ $3,969,000	+ 6			

Need for increase:

Baseline water quality--(Increase $1,800,000)
The baseline water quality program is a system of stream quality measurements, systematic and continuing in nature and multipurpose in character, intended to be the factual base for all waste management and water supply studies by all concerned levels of government. Inasmuch as one principal factual base may be used by all special-purpose investigators, it is in the interest of national efficiency that such a base be obtained by one agency for the use of all.

The total increase needed for this program is $1,800,000, of which $887,000 will be reprogrammed from existing funds. The increase will provide for expansion of data collection activities at 230 additional stations within the Survey's National Stream Quality Accounting Network and will bring implementation of the network to 65% of its operational design with even distribution of stations nationwide; and will allow continuation of evaluative studies on methodology for assessing total river quality and trends in quality. This program provides a balanced and unbiased basis for evaluating stream quality and stream-quality changes in the United States, for use by Federal, Regional, and State agencies in judging the effectiveness of current quality-control programs and in the assessment of management alternatives on a nationwide scale. In terms of Federal interest, the network is designed to respond to stream information demands of agencies such as the Water Resources Council, the Council on Environmental Quality, the Corps of Engineers, and special commissions such as the National Commission on Water Quality. In addition to responding to these

demands, the network complements the efforts of the Environmental Protection Agency in fulfilling the information requirements specified under section 104(a)(5) of P.L. 92-500 which calls for a nationwide water-quality surveillance system.

Program of work:

The water-data collection, resources investigation, and research activities included in this program support that segment of the National Water Data System in which the Federal interest is paramount, including the public domain, river basins and aquifers that transcend State boundaries, and other areas of international or interstate concern. Major program segments are: Streamflow, ground-water and water-quality data acquisition, analysis, storage, and dissemination (including baseline water-quality data, ($10,875,000); regional resource appraisals including ground-water studies ($668,000); basic hydrologic investigations and research aimed at increased understanding of the operation of hydrologic systems ($5,070,000); hydrologic investigations on public lands managed by Bureau of Land Management ($337,000); training, publication and other supporting services ($3,060,481); coordination of national water data activities ($792,000); National Water Data Exchange ($257,000).

Status of program:

Although many data have been and are being collected, there remain significant deficiencies in the geographical distribution and in the kinds of data required. This situation exists not only because of population growth and shifts and depletion of some local sources of water but also because the development and management of water on a regional and national basis requires more and better supporting data.

While the long established streamflow program is responsive in general to the current need, there is a shortage of data on the very large number of small streams. In addition, the lack of adequate data on the ground water resource and the quality of water reduces the effectiveness of planning, design, development, management and use of the Nation's waters and poses a problem to concerned Federal and State planning and enforcement agencies. In keeping with the Survey's responsibility for providing timely data, and to alleviate the most critical of these deficiencies, adjustments to program components are being made by transferring funds to programs of higher national urgency and priority.

The National Stream Quality Accounting Network is designed to yield balanced information nationwide on the quality of the Nation's surface-water resources and is currently (FY 1974) about one-fifth implemented in terms of areal coverage, suites of water-quality variables, and sampling frequencies. The proposed increase will achieve nearly 65 percent of the planned network program while maintaining the uniform standards of the operational design and extensive coverage of several types of water-quality variables not normally carried out under our State-cooperative data program. Data collection activities of the intensive assessment of the river quality of the Willamette River (Oregon) basin study is nearing its halfway point. Interpretation of data and evaluation of information is underway with conclusion of the study and report set for end of FY 75.

(2) FEDERAL-STATE PROGRAM: FY 1974, $25,371,000; FY 1975, $26,483,000 Increase, $1,112,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
+ $ 850,000	--	--	--	Reimbursement for space, services and facilities provided by GSA in accordance with Public Buildings Amendments of 1972, P.L. 92-313.
+ 262,000	--	--	--	Annualization of October 1973 pay raise.
+ $1,112,000				

Program of work:

Projects approved for cooperative funding with more than 500 agencies contribute to solution of urgent national and State problems and strengthen the National Water Data System effort, thereby appreciably reducing the amount of data collection requiring all-Federal funding.

Cooperative projects are jointly planned by State and Federal representatives at grass-roots level which assures optimum melding of Federal and State priorities. Major program activities and proposed 1975 funds are:

	Federal matching funds	State and local funds
Collection, analysis, and dissemination of streamflow, water quality, ground-water, and sediment data.	$12,750,000	$13,250,000
Areal resource appraisal	7,300,000	7,450,000
Studies related to critical water problems	2,800,000	2,900,000
Other data collection and applied research	3,250,000	3,500,000
TOTAL	$26,100,000	$27,100,000

Status of Program:

Efficient and effective conservation, development, and utilization of the Nation's water resources is impossible without an adequate data base. This program provides more than half of that base and is a continuing program with direct response to changing and increasing mutual needs of Federal and local governments for data in support of water resources decision-making.

As problems arise and as the need for new kinds of water information develops (e.g., waste emplacement, environmental protection, energy development, systems modeling, pesticides, radioactive materials in water and water use), the States adjust their requests and offerings for the cooperative programs. Although the studies are often linked closely to local water problems, they are of substantial national interest because they yield information that has applicability to similar problems elsewhere. More importantly, they comprise segments of the regional or national picture.

Data-collection activity through operation of network stations is primarily a long-term continuing function. Areal appraisals and interpretive studies, which are an important segment of this program, comprise hundreds of individual projects which, for the most part, are completed in one to three years with a published report.

On-going activities are distributed as follows:

Data collection, analysis and dissemination; includes 7,400 continuous record and 5,400 partial record streamflow stations, 1,200 lakes or reservoir stations; 3,000 water-quality stations, 14,000 ground-water observation wells, and 12,000 project-type short-term wells.

Areal resource appraisals and problem studies include urban hydrology, sedimentation, estuaries, lakes, hydrobiology, stream system modeling, aquifer modeling; water quality modeling, saline waters; flood frequency and magnitude; floods and droughts; waste disposal and others totaling 503 projects.

Studies related to critical problems include 47 projects on urban and flood mapping; 25 projects on deep waste emplacement; 11 projects on estuarine problems and 19 projects on artificial recharge.

WATER RESOURCES INVESTIGATION: FEDERAL-STATE PROGRAM
ESTIMATES OF STATE AND MUNICIPAL OFFERINGS FOR FY 1975
(Thousands of Dollars)

State	State Offerings to be Matched 1974	Estimated Offerings for Matching 1975	Increase (+) Decrease (-)
Alabama	470	572	+ 102
Alaska	300	316	+ 16
Arizona	541	577	+ 36
Arkansas	251	268	+ 17
California	1,978	2,212	+ 234
Colorado	614	669	+ 55
Connecticut	241	324	+ 83
Delaware	44	85	+ 41
Florida	2,102	2,616	+ 514
Georgia	415	452	+ 37
Hawaii	311	327	+ 16
Idaho	350	477	+ 127
Illinois	249	262	+ 13
Indiana	504	513	+ 9
Iowa	292	315	+ 23
Kansas	566	594	+ 28
Kentucky	363	459	+ 96
Louisiana	645	783	+ 138
Maine	60	60	0
Maryland	375	502	+ 127
Massachusetts	254	275	+ 21
Michigan	343	355	+ 12
Minnesota	384	440	+ 56
Mississippi	276	333	+ 57
Missouri	270	304	+ 34
Montana	215	292	+ 77
Nebraska	334	366	+ 32
Nevada	195	196	+ 1
New Hampshire	57	65	+ 8
New Jersey	479	661	+ 182
New Mexico	615	713	+ 98
New York	1,169	1,620	+ 451
North Carolina	410	440	+ 30
North Dakota	332	359	+ 27
Ohio	413	438	+ 25
Oklahoma	255	272	+ 17
Oregon	377	418	+ 41
Pennsylvania	921	958	+ 37
Rhode Island	39	49	+ 10
South Carolina	245	300	+ 55
South Dakota	204	240	+ 36
Tennessee	354	405	+ 51
Texas	1,606	1,800	+ 194
Utah	461	509	+ 48
Vermont	56	61	+ 5
Virginia	312	398	+ 86
Washington	1,001	1,057	+ 56
West Virginia	176	202	+ 26
Wisconsin	488	697	+ 209
Wyoming	302	320	+ 18
American Samoa	32	33	+ 1
D.C.	1	2	+ 1
Guam	31	35	+ 4
Puerto Rico	357	345	- 12
Trust Terr. Pac.	58	60	+ 2
Virgin Islands	2	2	0
Subtotal	23,695	27,403	+3,708
Paycosts	1,296	--	
State share space	--	850	
Shortfall	--	- 2,153	
Program admin.	380	383	
TOTAL Fed funds, Coop Program	25,371	26,483	

B. Critical National Water Problems

The activities in this program are directed toward providing hydrologic data required for the evaluation and solution of urgent existing and emerging problems.

FY 1974, $2,648,000; FY 1975, $5,403,000; Increase, $2,755,000.
The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
- $ 153,000	- 6	--	--	Transfer funds and personal services to data programs of higher priority.
+ 381,000	--	--	--	Reimbursement for space, services and facilities provided by GSA in accordance with Public Buildings Amendments of 1972, P.L. 92-313.
+ 100,000	+ 1	100,000	1	Accelerated Energy Research and Development on subsurface storage of heat.
+ 1,200,000	+10	1,200,000	10	Accelerated Energy Research and Development on oil shale hydrology.
+ 1,200,000	+32	1,200,000	32	Accelerated Energy Research and Development on water supply and quality for coal mining.
+ 27,000	--	--	--	Annualization of October 1973 pay raise.
+ $2,755,000	+37			

Need for increase:

Underground heat storage--(Increase $100,000)
The increase will provide for initiation of studies on the feasibility and techniques for the subsurface storage of heat. About two thirds of the energy input for steam electric generation must be dissipated as waste heat, generally in the form of heated water. With current shortages and rising prices of fuel for space heating and process heat for industry, the economics of cyclic subsurface storage of heat in the form of ground water is improving. In suitable locations large amounts of heat generated in the summer could be stored for use in the winter.

Oil shale hydrologic research--($1,200,000)
The increase will provide for initiation and expansion of field data collection and studies to provide the data base needed to solve many new water problems

and environmental questions that will be caused by production of shale oil on Federal and private lands in the Colorado-Utah-Wyoming area. These problems cannot be assessed or solved without a better definition of the hydrologic system in the shale area. Planning, developing, and operating the Prototype Oil Shale Leases require information to predict the availability of ground water on a lease, control possible hazards due to mine flooding, determine quality of water for use or disposal, and reduce impacts of operations on the Colorado River system.

Coal: water supply and quality--($1,200,000)
The increase is needed to provide water information required for decisions on siting of mines and conversion plants, which, especially in arid western coal districts, depend in large part on water supply and waste disposal arrangements. Operation Independence calls for tripling coal production by 1985. This vast increase in use of coal as a fuel for electric power generation and for conversion to gas and liquid fuels will impose large new demands for water on the available supplies and will create new environmental impacts on water resources. The present information base is inadequate for arriving at such decisions and it is imperative that it be strengthened in order to avoid costly siting errors.

Program of work:

Major program components and estimated funding are: Continue field investigations to evaluate the feasibility of ground-water recharge techniques in different geohydrologic environments, and research on chemical and physical phenomena that control artificial recharge ($1,166,000); continue and extend field investigations on subsurface waste disposal and research on fundamental problems related to waste injection ($1,214,000); delimit flood hazards on about 700 standard quadrangle maps ($373,000); extend data collection and studies of currents and dissolved and suspended solids of specific estuaries necessary to develop models for identifying and alleviating coastal problems ($150,000).

Accelerated Energy Research and Development Programs.
The underground heat storage program will be comprised of studies on theoretical analysis of thermal diffusion in ground water and thermal conductivity of aquifer materials, assessment of selected sources of waste heat near suitable ground water reservoirs and preliminary economic analysis of cost effectiveness of the technique, and design of mathematical models of typical aquifer situations under different climatic regimes.

The oil shale hydrologic research program will measure aquifer coefficients of different zones, permeability between zones, determine the relation and occurrence of fresh and saline water, and head relations between aquifer zones. Monitor wells will be completed in aquifer zones to measure present conditions and to predict and observe changes caused by developments. A significant part of the program will be contract drilling and well construction. Additional streamflow and water quality stations will be established to define changes in the hydrologic system resulting from additional irrigation, municipal, industrial, or from oil shale mining demands.

The coal mining water supply and quality program components are appraisal of water needs and availability on a regional basis with special emphasis on western surface mining, site studies of ground water regimes and water control measures in surface and underground mining, impact of mining especially dewatering and waste emplacement on ground water regimes, and downstream effects of coal mining on physical and chemical quality of water with special reference to the Appalachian region.

Status of Program:

Ground-water recharge studies include both spreading basins and injection wells and are in the semi-arid High Plains and the glacial deposits on Long Island. Recharge studies in secondary permeability terrane have been completed in the fractured carbonate rock at St. Paul and a report is in preparation with studies in fractured volcanic rock to follow. Supporting research on the principles of ground-water recharge continue. Being investigated are problems of plugging caused by bacterial growths in the upper few inches of soil beneath spreading basins, geochemical changes taking place as water moves through the unsaturated zone, and plugging caused by different kinds of clay particles.

The objective of the subsurface waste storage studies is to provide an information base for decision making on the use of the subsurface for waste storage without endangering valuable fresh water and potentially valuable saline water resources. Although deep waste injection wells have increased in numbers in recent years to about 250, they pose a much smaller threat to water resources than do the many thousands of waste disposal sites on or near the surface. Many of the most toxic substances now discharged at the surface are proposed candidates for deep well injection. Studies are continuing on fundamental principles that apply to both shallow and deep impacts of waste in the subsurface, including the chemical reactions of organic substances in ground water, physical and chemical reactions with aquifer materials, the movement, dilution, and dispersion of pollutants in the subsurface, and the measurement of existing stresses related to potential seismic effects of injection.

The objective of the flood-hazard mapping component is to provide flood information as a guide for flood-plain management. The program was started in 1969 in response to recommendation 1(B) of the Task Force on Federal Flood Control Policy (House Document 465, pages 21-22). About 95 percent of the 8,900 most urgently needed maps of developed or developing areas were completed by August 1973 (1974 FY). Plans for 1975 FY are to continue mapping on the basis of priorities: (1) developed or developing areas, (2) areas of potential future development, (3) public areas where management or planning decisions are required, and (4) undeveloped recreational areas.

Estuarine and coastal studies will be continued on the geochemistry and circulation patterns in San Francisco Bay and the effects of quality of water on estuary biota in Chesapeake Bay. Coupled with hydrologic studies and data that have been collected in Port Royal Sound, Delaware, Tampa, and other bays under the Federal and the Federal-State cooperative program, models are being developed that will permit assessing the usability of fresh water supplies now naturally present in coastal areas and forecasting the impact of man-made developments on the hydrologic environment.

C. Employee Compensation Payments

FY 1974, $370,519; FY 1975, $403,519; Increase, $33,000.
The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
+ $ 33,000	--	$ 403,519	--	For reimbursement to Bureau of Employees Compensation

Need for increase:

The increase is required to reimburse the Bureau of Employees Compensation, Department of Labor, for payments made during FY 1973 for Geological Survey employees injured since December 1, 1960 (Public Law 86-767, Section 209).

7. Conservation of Lands and Minerals

FY 1974, $17,773,000; FY 1975, $22,628,000; increase, $4,855,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	+$1,626,000	+ 52	$8,141,000	263	Improve regulation of OCS Oil and Gas operations.
(2)	+ 850,000	+ 42	$7,069,000	302	Increase regulation of operations on Federal and Indian Mineral leases commensurate with increased industry activity.
(3)	+ 405,000	+ 15	$4,280,000	76	Acquire and interpret geophysical data for accelerated schedule of OCS lease sales.
	- 811,000	--	--	--	Fulfillment of contract requirements for reservoir studies in connection with the Sun Oil Co. lawsuit.
(4)	+ 1,380,000	+ 46	$3,138,000	110	Acquire data and map, delineate, and evaluate high potential Federal coal lands.
(5)	+ 996,000	--	--	--	Reimbursement for space, services, and facilities provided by GSA in accordance with Public Building Amendments of 1972, P.L. 92-313.
(6)	+ 409,000	--	--	--	Annualization of October 1973 pay raise.
	+$4,855,000	+155			

Cost Factors Involved in Increases

(1) Fifty-two new positions at an average rate of $19,000 which includes salaries, other employee compensation, employee benefits, travel and subsistence and other associated costs, $988,000.

Helicoptor contract service to transport inspectors, $428,000; contract for development of a failure information dissemination system, $210,000.

(2) Forty-two new positions at an average rate of $20,238 which includes salaries, benefits, other compensation; travel and subsistence, and other associated costs, $850,000.

(3) Fifteen new positions at an average rate of $20,000 which includes salaries, benefits, travel and subsistence, and other associated costs, $300,000; purchase of high resolution geophysical data for pre and post sale evaluation and operations, $105,000; analysis of geologic and engineering data in support of the Sun Oil Company lawsuit against the Government-project completed in FY 1974, -$811,000.

(4) Forty-six new positions at an average rate of $20,000 which includes salaries, benefits, travel and subsistence, and other associated costs, $920,000; contract drilling to determine physical nature of coal, $460,000.

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Analysis by Subactivities

Subactivity	FY 1973 Amount Available	FY 1974 Amount Available	FY 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
A. Mineral Lease Management				
(1) Outer Continental Shelf	$ 5,294,681	$ 6,299,000	$ 8,141,000	+$ 1,842,000
(2) Federal and Indian Lands	5,030,697	5,364,000	7,069,000	+ 1,705,000
B. Resource Evaluation and Classification				
(1) Outer Continental Shelf	$ 2,662,839	$ 4,595,000	$ 4,280,000	-$ 315,000
(2) Federal and Indian Lands	1,430,914	1,515,000	3,138,000	+$ 1,623,000
TOTAL	$14,419,131	$17,773,000	$22,628,000	+$ 4,855,000

REVENUES FROM LEASED MINERAL LANDS
(in thousands of dollars)

LAND CATEGORY	FY 1972 Royalties	FY 1972 Bonuses	FY 1973 1/ Royalties	FY 1973 1/ Bonuses	FY 1974 2/ Royalties	FY 1974 2/ Bonuses	FY 1975 3/ Royalties
Outer Continental Shelf	$ 359,592	$ 96,304	$ 357,364	$ 3,842,745	$ 427,800	$ 3,300,000	$ 478,000
Federal Lands Onshore	107,695	1,118	110,679	2,237	134,700	1,500	154,000
Indian Lands	21,279	6,117	22,465	4,953	29,100	5,000	33,000
TOTAL	$ 488,566	$103,539	$ 490,508	$ 3,849,935	$ 591,600	$ 3,306,500	$ 665,000

1/ Royalties and Bonuses estimated in part
2/ Royalties and Bonuses estimated
3/ Royalties estimated, but no projection of bonuses

A. Mineral Lease Management

(1) Outer Continental Shelf: FY 1974, $6,299,000; FY 1975, $8,141,000; increase, $1,842,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
+$1,626,000	+ 52	$8,141,000	263	Complete implementation of recommendations to improve safety of OCS operations and increase capability consistent with an accelerated leasing schedule, to regulate properly operations on OCS oil and gas leases.
+ 70,000	--	--	--	Reimbursement for space, services, and facilities provided by GSA in accordance with Public Building Amendments of 1972, P.L. 92-313.
+ 146,000	--	--	--	Annualization of October 1973 pay costs.
+$1,842,000	+ 52			

Need for Increase: The increase will implement program activities arising from recommendations of NASA and National Academy of Engineering studies in FY 1973 and the internal Geological Survey study in FY 1972 designed to improve the safety of offshore drilling and production operations. Principal recommendations of these studies are, 1) establish standards and specifications, 2) system safety analysis, failure reporting and information exchange, and 3) improve the lease management program, inspection activities, and OCS order development. Implementation of many of these was begun in FY 1974. The increase will also permit a near optimization of personnel of the required disciplines (engineers, geologists, technicians) and helicopter support to review industry requests for approval of plans for development and to monitor properly a growing OCS oil and gas industry. Industry in FY 1975 will increase drilling and development on account of renewed and accelerated OCS leasing.

Program of Work: In FY 1975 there will be 970 multi-well production platforms, and 1150 other OCS facilities such as single-well structures and production handling platforms. About 1000 new wells will be drilled, and approximately 10,900 completed well zones will be capable of production on the OCS. This represents a workload increase of about 6% to 8%. Responding to these developments, the program of work includes:

- Planned program activities to implement NASA, NAE and other study recommendations. These include system safety analyses of drilling and production operations; establishing failure

reporting and corrective action systems; analyzing need for research and development of safety equipment; and establishing standards for operations and procedures.

- Engineering, geophysical and geologic analysis of all technical factors prior to approval of applications to drill the 1000 new wells. All technical data will be reviewed to identify unstable bottom conditions, faults, possible zones of abnormal pressures or temperatures, or presence of zones where circulating drilling fluid could be lost. Engineering analysis includes design of proposed individual well casing programs, practices and regulatory requirements.

- Geologic and engineering analysis and review prior to approval of about 14,000 industry applications to conduct development or production operations, or to change approved operational plans. Examples are applications to erect platforms, install pipelines, change productive zones in wells, alter the mechanical condition of producing wells, initiate secondary recovery operations, and unitize leases and commingle production.

- Establishment, or review of industry established, maximum production rates (MPR) for 400 new well zones to be completed in the undisputed area of the OCS; review and modification of MPR's for half (4600) of 9200 producing well zones in the undisputed area; calculation of the maximum efficient rate of production (MER) for 10-12 producing reservoirs; and monitoring production in order to assure control of actual producing rates at approved MPR levels.

- Inspection of industry's field activities to enforce compliance with regulations, orders and approved plans.

  -- Daily inspection of Sun Oil Company's and Union Oil Company's operations in the Santa Barbara Channel off California. Weekly inspection of other Channel drilling operations and twice weekly inspection of other producing operations. In addition, pollution inspections by air and "beach-walk" are made of the Santa Barbara Channel beach areas weekly.

  -- In the Gulf of Mexico, inspection of each new drilling well and every multi-well production platform will be possible in fiscal year 1975. Pollution overflight inspections are made in the area traversed flying to and from regular inspection work. The presence of the inspector force in the field provides an additional benefit beyond inspection of individual operations, for it is a "visible deterrent" to willful violation of regulations and orders. On the average, this presence is evident at 8 different places on the OCS at any given time of day.

- Maintenance of 952 OCS royalty production accounts, and 798 accounts for minimum royalties and rentals. Approximately 70% (666) of the royalty production accounts will be audited during the year. It is expected that total royalty income from OCS oil and gas operations will be about 478 million in FY 1975.

Status of Program: An accelerated OCS lease sale schedule currently projects three sales for a million acres each annually. This is about a 200% increase above the average area sold in the past several years. Sales of this magnitude in FY 1974 will reflect large increases in management workload in FY 1975 especially relative to exploratory drilling. This activity would be expected to increase in FY 1975 about 50% over FY 1974. Developmental and production activities would increase but the full brunt of sale acceleration in FY 1974 will not be felt until after FY 1975. FY 1975 workload increase due to increased industry activity is expected to be about 7% with sharp increases in following years as development is completed on the increased area under lease and full production is effected.

(2) Federal and Indian Lands; FY 1974, $5,364,000; FY 1975, $7,069,000; Increase, $1,705,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
+$ 850,000	+ 42	$7,069,000	302	Improve response to environmental requirements for mineral and oil and gas development and to regulation and supervision of lease operations.
+ 707,000	--	--	--	Reimbursement for space, services, and facilities provided by GSA in accordance with Public Building Amendments of 1972, P.L. 92-313.
+ 148,000	--	--	--	Annualization of October 1973 pay raise.
+$1,705,000	+ 42			

Need for Increase: The increase is needed to improve onshore regulatory functions. Industry operations on Federal and Indian oil and gas and other mineral leases have a potential to affect the environment adversely if the capability for Federal regulation is weak. Current resources permit only about 10-20% of the required oil and gas lease inspection work to be done. About half of the field inspection work for other minerals is accomplished. Only the very highest priority program activities can be given adequate attention. To assure that industry operations do not have undesirable effects on the environment, the lease management program for supervision of industry operations on Federal and Indian lands needs to function at much higher levels than at present. The increase will provide some improvement toward achieving an acceptable level of performance. Refinement of requirements for this program is presently in progress through the medium of contract studies directed to improvement of management and supervisory activities.

Program of Work: There will be 11,725 producing oil and gas leases and 3,000 properties producing other minerals in FY 1975. About 1,860 new oil and gas wells will be drilled during the year. The proposed program of work includes:

- Review of the findings of the management study being conducted in FY 1974 to determine which study recommendations are to be implemented and to develop action plans to implement those study recommendations.

- Investigations of about 700 coal and other mineral prospecting permit applications to determine whether the deposits are subject to the prospecting or leasing provisions of the Mineral Leasing Act.

- Examination of approximately 800 applications under the mining reclamation regulations relative to measures to control erosion, reclaim lands, prevent water and air pollution, protect wildlife, and prevent hazards to the public.

- Geologic and engineering analysis, review and action on about 12,725 industry applications for initial approval to conduct exploration or development operations, for changes in operational plans, etc., on Federal and Indian leases. Included are intensive environmental analyses of applications on exploratory oil and gas wells and new mining plans which are expected to result in the preparation of about 25 environmental impact statements.

- Inspection of industry's lease and permit field activities to enforce compliance with regulations, stipulations, and approved plans. Approximately 8500 regularly scheduled inspections on oil and gas leases and about 2700 inspections of mining operations will be made in FY 1975. In addition, about 350 inspections of field operations in large areas of concentrated production will be made in order to identify and correct existing or potential pollution hazards. Oil and gas test wells, operations on prospecting permits, proposed surface mining operations, and producing operations on oil and gas and other mineral leases will be field checked.

- Maintenance of 15,685 oil and gas, coal and other mineral revenue accounts. About 20% of these accounts will be audited to assure proper and timely payment of an expected $187 million royalty income in FY 1975.

Status of Program: Oil and gas production from onshore Federal and Indian lands supplies about 5 to 6% of the Nation's total domestic oil and gas production. The production of minerals such as potash, phosphate, and sodium is expected to remain relatively stable, but their production from Federal and Indian lands will continue to have a significant impact on the total domestic production. In 1972, 72% of potash, 7 1/2% of phosphate, 67% of sodium and 37% of lead production for the Nation came from Federal and Indian lands. Coal production in FY 1975 is expected to reach nearly 45 million tons or about 7% of the Nation's total coal production. This dramatic increase in coal production places a stress on the management workload which continues to grow and add to a residual workload because existing lease producing operations require more attention as primary production is replaced by secondary recovery methods, mining operations become larger, the concern for environmental protection increases, and the multiple land use concept receives wider acceptance.

B. Resource Evaluation and Classification

(1) Outer Continental Shelf: FY 1974, $4,595,000; FY 1975, $4,280,000; decrease, $315,000. The decrease consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
+$ 405,000	+ 15	$4,280,000	76	Acquire and interpret geophysical data for pre-sale tract selection and evaluation for an additional one million acre sale to meet demands of the accelerated OCS lease sale schedule.
+ 50,000	--	--	--	Reimbursement for space, services, and facilities provided by GSA in accordance with Public Buildings Amendments of 1972, P.L. 92-313.
- 811,000	--	--	--	Fulfillment of contract requirements for reservoir studies in connection with the Sun Oil Co. lawsuit.
+ 41,000	--	--	--	Annualization of October 1973 pay raise.
-$ 315,000	+ 15			

Need for Increase: The increase will provide for accelerating the level of geophysical data acquisition in OCS frontier areas. In FY 1975 it is expected that additional high resolution data beyond the Channel Islands area off Southern California will be acquired. The increase will also provide for the addition of 15 people to the evaluation staff to provide for an increased level of geophysical data interpretation and geological and engineering analysis for evaluating an additional million acre sale (3 million in total) to assure that the accelerated OCS lease sale schedule can be met.

Program of Work: Three general OCS lease sales, each for 1,000,000 acres, located off Southern California and in the Gulf of Mexico, are tentatively scheduled for FY 1975.

Pertinent geologic and engineering data obtained from industry's operations on leased lands will be merged with subsurface structure maps developed from purchased geophysical data in extending basic knowledge of geologic structures and resources of virgin areas. These basic data are needed for the selection and evaluation of nearby unleased tracts which will be offered for sale.

About 25,000 line miles of Common Depth Point (CDP) geophysical data purchased by contracts from industry will be interpreted for use in the selection, evaluation, and determination of the pre-sale value of tracts to be offered in general (wildcat) sales. These data will subsequently supplement available geologic data to identify and evaluate drainage tracts. In addition to the selection and evaluation of sale tracts, about 20,000 line miles of high resolution geophysical data will be acquired and interpreted for environmental impact analysis for the three sales tentatively scheduled for FY 1975. These high resolution data will also be used in the identification of potential hazards to drilling, platform placement,and other development operations.

Geophysical data needed to support FY 1975 lease sales will be acquired in FY 1974 and early FY 1975. Some data will also be acquired in FY 1975 to prepare for FY 1976 lease sales.

Status of Program: This program utilizes geologic data obtained from industry for leased areas and geophysical data purchased by contract from service companies and universities. The program permits evaluation of all sale tracts offered prior to sale and acquisition of a sound data base for use in the selection as well as evaluation of tracts prior to sale and in the review of development plans and MER determinations after tracts are leased.

(2) Federal and Indian Lands: FY 1974, $1,515,000; FY 1975, $3,138,000; Increase, $1,623,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
+$1,380,000	+ 46	$3,138,000	110	Acquire data and map, evaluate and delineate areas subject to competitive leasing for coal.
+ 169,000	--	--	--	Reimbursement for space, services and facilities provided by GSA in accordance with Public Building Amendments of 1972, P. L. 92-313.
+ 74,000	--	--	--	Annualization of October 1973 pay raise.
+$1,623,000	+ 46			

Need for Increase: Coal is a primary source of energy and is the principal alternative to petroleum imports for bridging the developing energy gap. Federal lands contain large resources available for development. However, present knowledge is not adequate for leasing them to the greatest benefit to the public. These resources need to be evaluated and blocked into Known Coal Leasing Areas (KCLA's) so that they can be leased by competitive bidding without threat of challenge of, or appeal from, leasing methods. The increase will provide for added capability to delineate prime areas, KCLA's, for competitive leasing of coal at an accelerated rate. The increase will provide for an adequate amount of core hole information to determine quality and thickness of beds. Also, it will enable the addition of 46 people to the evaluation staff to map, evaluate and define KCLA's.

Program of Work: Geologic mapping, supplemented by sampling, drilling and trenching will be undertaken to acquire basic classification data on Federal mineral lands (thickness, quality, depth and extent). Identification of potential water reservoir sites, including those for pumped-storage, and studies and evaluation of the development potential of public land presently withdrawn or classified for water power or reservoir sites will be made. This will provide for:

- Continuing investigation of withdrawn and prospective areas identified as having potential value for leasable minerals, and classification of mineral lands for disposal, retention, exchange and selection.

- Further elimination of outstanding waterpower and reservoir site withdrawals thereby clearing title to Federal lands found to have insufficient development potential to warrant retention in a withdrawn status.

- Delineation of known mineral areas (KGS, KGRA, KLA) sufficiently evaluated in advance of lease applications to warrant competitive rather than non-competitive leasing.

- Evaluation of mineral lands being offered for competitive lease to assure receipt of fair value to the public in return for leasing of Federal mineral deposits.

- Publication of all non-confidential mineral resource data resulting from these activities in order to encourage exploration and development of nationally important domestic mineral resources.

About 4,000,000 acres of Federal mineral and water resource site lands will be classified under this program in FY 1975 of which 3,000,000 acres in Wyoming, Montana, Utah, Colorado, and New Mexico, will be coal land classification. About 20,000 mineral and water resource classification and evaluation reports will be made in connection with Federal land and leasing programs.

Status of Program: About 600 million acres of Federal lands have been identified as having potential for various leasable minerals and water resource development. About 90 million acres are withdrawn or identified as potentially valuable for coal. Of the 90 million acres of potential Federal coal lands, about 30 million acres have been identified as target areas having the greatest potential and will require about 1,000,000 feet of drilling. These target areas are located in the states of Colorado, Montana, New Mexico, North Dakota, Utah, Washington, and Wyoming and will receive priority attention in the programming of 3,000,000 acres per year for coal land classification.

About 10 years at the scheduled rate of progress will be required to evaluate the 30 million acres of highest potential coal targets. About 500,000 acres will be classified each year for leasable minerals other than coal with priorities for work based on areas containing a high percentage of Federal lands, high potential leasing interest, and withdrawn status.

A continuing program is being conducted to identify and assure availability of reservoir sites on Federal lands for regulation, storage, and conservation of surface water. This program serves to preserve Federal land in such sites from disposal or incompatible uses that would forestall efficient river basin

development. Early withdrawals and classification made when streamflow and map data were limited or nonexistent are being systematically reviewed to eliminate from withdrawal lands in those sites with low development potential. About 450,000 acres located in 10 river basins in 6 western states will be reviewed during FY 1975.

8. General Administration

FY 1974, $3,087,000; FY 1975, $3,191,000; Increase, $104,000 for annualization of October 1973 Pay Raise.

	FY 1973 Amount Available	FY 1974 Amount Available	FY 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
General administration expenses	$2,872,000	$3,087,000	$3,191,000	$ +104,000

General administrative expenses provide for management, executive direction and coordination, and administrative support to the Bureau as a whole. This includes such essential functions as budget, finance, personnel, contract negotiation and administration, property management, organization and methods and management analysis.

Other administrative funding:

General administrative expenses of the Geological Survey are financed in part by assessments on direct program funds and on funds from other Federal agencies and sundry non-Federal sources (no assessment is levied on cooperative funds from State and local governments). These resources are allocated to all areas of administrative support--both at headquarters and in the field in support of the expanded substantive program. Areas of special emphasis are shown below:

Executive Direction - Interdisciplinary projects such as Resource and Land Investigations Program, Land Use Data and Analysis Program, the EROS Program, environmental impact reports, and the preparation of numerous studies and reports in response to natural resource and energy concerns are continuing to require increased special attention and coordination.

Personnel - Increasing activity of the unions to organize and negotiate agreements with agencies necessitates that extensive training and strong leadership and technical guidance continue to be provided to assure a successful labor-management relations program.

The Equal Opportunity Act of 1972 has further emphasized the continued need for a positive program to assure equality of opportunity in all employment matters with special emphasis on the full utilization and career development of women and minority groups. Particular emphasis will continue to be given to this effort through a special program "Minority Participation in Earth Sciences" committed to advancing the training of minority peoples in earth sciences as a means of increasing employment in its ranks.

There will be continued concentration in the vital area of review and evaluation of personnel management program activities. Analysis, review and study audits are being designed to assess the most efficient and economic utilization of manpower relative to effectiveness of personnel management policies and operations.

There is an increasing need to develop a more specific and direct relationship between career development and training programs. Special concentration and appropriate resources will be devoted to the unique administrative management needs of a scientific research organization. The identification and installation of bureau wide administrative management career development programs is imperative to respond to the growing complexity of all administrative support activities. High calibre candidates at entrance levels are needed and long term career opportunities must be provided to assure continued availability of talented administrative management resources.

Property Control - A new expanded property control system is in the initial phase of implementation. The system is interfaced with the Survey's new accrual accounting system. It is designed to provide immediate data on types of equipment, quantities, duty stations, costs and management reports. It also identifies and establishes control of equipment in the custody of contractors and grantees. The acquisition of approximately $5,000,000 of personal property transferred from the National Oceanic and Atmospheric Administration is being integrated with the Survey's property system.

Safety Program - There will be continued emphasis on reaching compliance with the Occupational Safety and Health Act (OSHA) standards through the development of implementation of plans for facility changes, supervisor training, and periodic inspections. Priority attention will be given to expanding safety efforts to meet the intent of the guidelines established by the Department of Labor for all Federal agencies. The uniform safety procedures will be expanded to meet the needs of all Survey operations involving high risk of personal injury.

Financial Management - There will be continued monitoring, maintenance and refinement of the Survey's accrual accounting and financial management system that was implemented in July, 1972.

This system is one of the most complete and sophisticated in Government and provides an excellent basis for expansion. It is anticipated that ultimately, additional resources will be devoted to the design of a centralized billing procedure and incorporation of programming data for the purposes of projecting, as well as measuring accomplishments.

Coordination of Assistance Programs - Monitoring the extent and effectiveness of all Federal domestic assistance programs with which the Geological Survey is involved includes the type of assistance, extent of the activity coordination with other Federal and assistance programs, and the organizational relationships within and outside of the Survey. These are primarily the responsibilities of the three Regional Assistant Directors of the Geological Survey, headquartered at Reston, Denver (Colo.), and Menlo Park (Calif.). Elements with which the Survey are concerned in the Post-Federal Assistance Review program are decentralization of authority to the field, Federal regional councils, standard Federal regions, the cooperative program, and greater involvement of and reliance upon State and local governments.

Regional Administration and Management - Administrative and management services are furnished in operating Survey's regional offices and providing liaison with Departmental and other agency representatives at the other Federal and Interior headquarters cities. Management Offices are now established at all three Survey Regional Offices (The Eastern Region Management Office is being established in the first part of FY 1974), and there are continuing shifts of personnel and functions necessary to support the new field organizational structure. Increased property management, incentives and awards, personnel management, and space management, and other delegation, procedural and processing changes, and analysis of administrative functions will be required on a continuing basis to provide maximum effective management.

Funding of General Administrative Expenses (GAE)
(Dollars in thousands)

Source of Funds for GAE:	FY 1973	FY 1974	FY 1975	Change
Surveys, Investigations, and Research:				
1. Special resource and environmental projects	131	143	392	+249
2. Alaska pipeline related investigations	28	19	7	-12
3. Topographic surveys and mapping	411	438	626	+188
4. Geologic and mineral resource surveys and mapping	627	769	1,592	+823
5. Minerals discovery loan program	2	2	2	--
6. Water resources investigations	537	671	807	+136
7. Conservation of lands and minerals	287	403	534	+131
8. General administration	2,872	3,087	3,191	+104
9. Facilities	--	--	--	--
10. Earth resources observation systems	329	294	249	-45
11. Resource and land investigations program	--	33	33	--
12. Land use data and analysis	--	--	88	+88
Total, SIR	5,224	5,859	7,521	+1,662
Other Federal/non-Federal sources	1,604	1,770	1,692	-78
Total, GAE	6,828	7,629	9,213	+1,584
Relationship to total bureau program:				
SIR:				
General administrative expenses	5,224	5,859	7,521	
Bureau total (budget authority)	149,386	170,902*	230,871**	
Ratio, GAE to total BA	3.5%	3.4%	3.3%	
State and local governments	0%	0%	0%	
Other funds	4.5%	4.5%	4.5%	
All funds:				
General administrative expenses	6,828	7,629	9,213	
Total bureau program	211,944	245,085*	302,883**	
Ratio, GAE to total	3.2%	3.1%	3.0%	

The decreased ratio of GAE to total funds in fiscal years 1974 and 1975 is attributed to non-assessment of the following items:

Non-assessable Items	FY 1974*	FY 1975**
Facilities	5,732	10,986
GSA rent costs	--	10,457
Total	5,732	21,443

9. Facilities

FY 1974, $5,732,000; FY 1975, $10,986,000; increase $+5,254,000.

The increase consists of:

Amount	Positions	Program	Positions	Explanation
$+3,250,000	--	$6,500,000	--	Lease Payments
+1,889,000	+16	3,686,000	31	Operation & maintenance of Headquarters facility
+800,000	--	800,000	--	Movement of personal household goods
-700,000	--	--	--	Reduction for non-recurring equipment items
+15,000	--	--	--	Annualization of October 1973 pay raise
$+5,254,000	+16			

Cost Factors Involved in Increase

Cost factors involved in the increase include lease payment, $3,250,000; operation and maintenance, $1,904,000; and a reduction of $700,000 for non-recurring equipment items. Also included is $800,000 for the movement of personal household goods of those employees who are eligible for reimbursement.

Need for Increase:

An increase of $5,254,000 is required to finance on an annual basis the lease payments and operation and maintenance requirements of the National Headquarters Facility, and to cover costs of reimbursement of eligible employees for the movement of personal household goods.

Program of Work:

Recurring Costs

(1) Lease Payments $6,500,000

A lease payment of $6.5 million will be required for the full year for the National Center. Lease payments include amortization of the construction cost of the Headquarters facility over a twenty year period.

(2) Operation and Maintenance $3,686,000

The Survey will reimburse GSA for operation and maintenance costs for the National Center. GSA has contracted for services such as cleaning; operation and maintenance of electrical, heating,

air conditioning and ventilating, and plumbing and sewage systems; maintenance of escalators and elevators; and protection of building and grounds.

Operation and maintenance costs also include those metered utilities, e.g. electricity and water. The Survey will assume the costs of providing essential support services such as facilities management, telecommunications, duplicating services, and an enlarged supply operation, which were previously furnished by the Department of the Interior and/or the General Services Administration prior to the relocation from Washington, D.C.

Non-recurring Cost

Movement of Personal Household Effects ..... $ 800,000

According to the latest survey of employees, approximately 700 will be eligible for reimbursement for the movement of household goods and related expenses. About half of this number are expected to move in each year of the two-year period, FY 1974 and FY 1975.

Status of Program:

Approximately 1,500 Survey employees have moved into the National Center as of January 1, 1974. Additional moves are contemplated to the National Center through June 30, 1974, when total occupancy will be approximately 2,300 employees. During fiscal year 1974 the Survey anticipates billings from General Services Administration of $1,500,000 for operation and maintenance and $3,250,000 for lease payments. These billings are based upon an average of six months building occupancy.

In October 1973, an award was made for the five color press. Current schedule calls for the press to be installed and made operational by the end of May 1974. Equipment and other specialized needs for special areas such as the auditorium, laboratories, library and mailroom have been ordered and will be delivered prior to June 30, 1974.

Authority for reimbursing eligible employees for the movement of household goods is contained in various laws and regulations such as Public Law 89-516, GSA Bulletin FPMR A-40, Employee Relocation Allowance Regulations, and the Federal Personnel Manual. As the Survey's move to Reston is considered a permanent change of station, employees will be entitled to claim reimbursement under the provisions of Public Law 89-516. For an employee to be eligible for payment of moving expenses, the Survey must make an official determination that the change of residence occurs because of the change in the employee's permanent work headquarters. This requirement will be met if:

1. The one-way commuting distance between the employee's old residence and Reston is at least 10 miles greater than the distance between his old residence and his old headquarters.

2. The employee's new residence is at least five miles closer to Reston than his old residence.

3. The commuting time from the old residence to Reston is at least 20 minutes greater than the commuting time from the old residence to the old headquarters location.

A board of review has been established to review applications from employees who do not meet the above requirements but believe other circumstances warrant moving their residence to Reston. This board reviews the pertinent facts of each case and has the authority to certify that the change of residence is necessary because of the change in headquarters location.

Latest estimates indicate that the expected expenditures for reimbursement to employees for movement of household goods during FY 1974 will be $786,000.

10. Earth Resources Observation Systems (EROS) Program

FY 1974, $8,954,000; FY 1975, $7,573,000; decrease $1,381,000

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$-1,405,000	--	$7,573,000	--	Reduction in planned scope of demonstration projects for solution of earth resources problems.
$+ 24,000	--	--	--	Annualization of October 1973 pay raise.
$-1,381,000				

Program of Work:

The proposed program for FY 1975 will include the following:

1. Research and Development $1,440,000

Objective: To conduct demonstrations in the value of using results of scientific and engineering studies, remote sensing results, data collection instruments, data processing techniques, and resource and environmental applications of the instruments and techniques. The goal is to apply research results to agency problems of land and resource inventory and assessment.

Description of work to be done:

a. Many significant applications have been demonstrated with experimental remote sensing data. Applications research will continue for the future solution of resource and environmental problems. A severely reduced research program oriented primarily to demonstrate further application of remote sensing data will be carried out.

b. Sensor requirements will be developed to provide for future data acquisition needs.

2. EROS Data Center: $4,257,000

Objective: To provide users, including the general public, with EROS Program services, including the sale of satellite and aircraft

data, routine production of thematic maps derived from satellite data, individual assistance to data users, and training of potential users and resource managers and scientists.

Description of work to be done:

a. Data archiving and distribution activities will be increased to provide storage of additional aircraft and satellite data and to distribute reproductions, including photographic copies and magnetic computer tapes, to an increasing number of users. The continuing flow of data from the ERTS satellite and Skylab requires an increase in the reproduction, processing, archiving and distribution activities of the Sioux Falls Data Center.

b. Thematic mapping of resource and environmental characteristics of the land will be done by automated and semiautomated means.

c. Training will include formal classroom lectures, laboratory experiments, and field exercises for organized classes of domestic and foreign resource managers and scientists. Courses for foreign participants will be conducted in cooperation with AID.

d. User assistance will be continued to furnish assistance to individual data users in methods of data reduction, interpretation, and feature extraction.

3. Space Experiments Program: $823,000

Objective: The conduct of research utilizing ERTS and Skylab data to determine the feasibility of use in solving specific resource and environmental problems. The space experiment program provides continuing support for principal investigators in ERTS and Skylab programs and economic benefit evaluation of satellite data.

Description of work to be done:

a. Continued support of NASA-approved ERTS space experiments to conduct research into new applications of ERTS data for the solution of specific resource and environmental problems.

b. Continued support of NASA-approved Skylab experiments to conduct research into the applications of Skylab data for the solution of specific resource and environmental problems.

c. Capabilities demonstrated in the experimental program will be used as the basis for evaluations to determine the economic, environmental, and social value of the use of satellite data for solution of resource problems. This study, based on initial ERTS-1 results, will be completed in FY 1975.

4. Program Management: $1,053,000

Objective: Executive direction and management of the EROS Program. Coordinate the experimental space and aircraft program elements and provide consistent organizational, administrative, and management support to all program elements.

Description of work to be done:

Coordination of activities associated with the ERTS-1 and Skylab experiments as well as the monitoring of contracts and continued planning for experimental

application of remote sensing to the activities of 10 Interior bureaus, and to state and local agencies.

Status of Program:

The move to the permanent facility of the EROS Data Center in Sioux Falls, South Dakota, was completed by January 1, 1974. Archives include 500,000 items of ERTS and Skylab imagery, 800,000 items of NASA aircraft imagery, and 1,888,000 items of conventional aerial photography. Access to the data base is available through computer processing and a computerized data management system. Total sales output of ERTS and aircraft remote sensing data are now at the rate of approximately 330,000 copies a year and rising. Autographic and photographic thematic mapping equipment has been developed and installed, and experiments are underway for the extraction of water, snow, vegetation, and works of man.

User assistance offices have been established at the Mississippi Test Facility, Bay St. Louis, Mississippi; Menlo Park, California; Denver, Colorado; and Anchorage, Alaska. A total of seven training courses have been provided for 130 state, regional, and Federal scientists in the use of remote sensing data, and one AID-sponsored four-week course was given to 28 foreign participants. EROS personnel have provided technical assistance in the use of ERTS data and training in Indonesia, Thailand, the Philippines, Botswana, and Mali, on behalf of AID.

Results obtained under the applications research and space experiments components of the program include:

1. ERTS-1 experiments have demonstrated that ERTS-quality data will support the states' efforts in response to the pending Land Use Policy Act. The cost for manual interpretation of these data is approximately 10-percent of interpreting similar information from aircraft data. Research also indicates that the ERTS data are ideal for automatic land-use analysis with consequent further improvement in accuracy and reduction in analysis costs.

2. Several demonstrations have shown that ERTS data provide for early detection of environmental changes. Paper mill effluents, waste dumps, strip mining and reclamation activities are examples of features that can be seen and monitored. A special investigation was undertaken that established the usefulness of ERTS data for monitoring the environmental effects of pipeline construction and other oil development activities in northern Alaska. ERTS data suggested that scars relating to exploration and drilling in the Maybe Creek/Umiat areas in the late 1940's and early 50's had substantially healed. The sole exception is one heavily used trail near Umiat that is visible on ERTS image.

3. Numerous large geologic features have been identified that seem to be related to the occurrence of metallic mineral deposits. Using computer enhancement techniques, previously unknown zones of alteration possibly indicative of mineralization, have been mapped near Goldfield, Nevada. This information can be expected to increase the efficiency of the search for minerals. Using high-altitude multispectral data obtained under the program, a consortium of private companies has found, explored, and are beginning development of a very large copper deposit in Arizona. Value in the ground is estimated to be between 1 and 3 billion dollars; additional prospects await exploration.

4. Possible oil-bearing structures in Naval Petroleum Reserve #4, northern Alaska that could not be observed from aircraft data or on the ground were

detected on ERTS pictures. The Navy is developing an exploration proposal that is based in part on these findings, that corresponds with the limited existing geophysical data.

5. ERTS data are being used to map the 1973 flood of the Mississippi River at a scale of 1:250,000. The result provides for damage assessment, improvement in the flood forecast model, evaluation of flood control measures, and a guide for redredging. The experiment established that the characteristics of ERTS data are such that the extent of flooding could be mapped as long as 26 days after the water had receded. This is a very important result since it is difficult to observe each area along the course of a flood at the time of the flood crest.

6. Water management models are being developed that use both the images and the data collection capability of ERTS to improve the water management in the Everglades National Park and surrounding areas of south Florida.

7. Geologic fracture zones are being identified from space data that improve the efficiency of ground water exploration and development in the southeastern United States.

8. Rangeland quality and extent for the entire State of Nevada were mapped in two man-weeks, measuring burned areas in forests with improved precision, and classifying crops with 90% accuracy in the western states, at vastly reduced cost.

9. Photo image maps at regional scales can be made from the ERTS images with greater geometric precision and higher information content than had been predicted. Public reaction to the experimental products thus far released has been so favorable that future products will be offered as sales items with proceeds being returned to the Treasury.

Photographs from the first Skylab missions were received at the beginning of FY 74, and by the end of FY 74 approximately 40,000 frames of high quality space photographs will be added to the EROS Data Center inventory. Skylab photographs provide higher resolution than the ERTS images thereby permitting an evaluation of the advantages and disadvantages of the two types of data for earth resources applications. The EROS Program is conducting several experiments with the Skylab data including photoimage mapping, land-use mapping, geologic, hydrologic, and archeologic studies.

High-altitude photographs have been used for the preparation of experimental orthophoto maps with emphasis on maps of Indian lands. Aeromagnetic data obtained in FY 1973 have been processed and incorporated into the aeromagnetic map of the U.S.

Programs have been developed, written, and tested for the computer storage and recall of land use and other information derived from the remote sensor data. The purpose is to facilitate the correlation of various types of information such as land ownership, land use, and minerals potential, to assist in land-use planning. The program will receive a full-scale test this year in a survey of the Great Smokies National Park and surrounding areas.

The operational satellite system design study being undertaken cooperatively with NASA is on schedule and the first phase was completed in September 1973. The cost/benefit study related to the development of an operational system is under contract, the second quarterly report is in hand, and the study is scheduled for completion in mid 1974. Studies relating to the requirements for advanced sensors are continuing.

EROS PROGRAM

	FY 1973 Amount Available	FY 1974 Amount Available	FY 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
1. Research and Development	2,693,000	2,401,000	1,440,000	- 961,000
a. Sensor Development	200,000	160,000	160,000	--
b. Applications Research	2,493,000	2,241,000	1,280,000	- 961,000
2. EROS Data Center	3,715,229	3,800,000	4,257,000	+ 457,000
a. Data Archiving & Distribution	3,115,229	3,200,000	3,657,000	+ 457,000
b. Thematic Mapping	450,000	150,000	150,000	--
c. Training	100,000	250,000	250,000	--
d. User Assistance	50,000	200,000	200,000	--
3. Space Experiments Program	2,150,000	1,450,000	823,000	- 627,000
a. ERTS Space Experiments	1,150,000	750,000	423,000	- 327,000
b. Skylab Experiments	--	200,000	100,000	- 100,000
c. Economic Evaluation	1,000,000	500,000	300,000	- 200,000
4. Operational System Study	830,715	250,000	0	- 250,000
a. Satellite System Design	99,070	100,000	0	- 100,000
b. High Altitude Photography	147,659	50,000	0	- 50,000
c. Airborne Geophysics	583,986	100,000	0	- 100,000
5. Program Management	968,044	1,053,000	1,053,000	--
TOTAL	10,356,988	8,954,000	7,573,000	-1,381,000

11. Resource and Land Investigations (RALI) Program

FY 1974, $944,000; FY 1975, $954,000; Increase, $10,000 for annualization of October 1973 pay raise.

	FY 1973 Amount Available	FY 1974 Amount Available	FY 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
Resource and Land Investigations	$ --	$ 944,000	$ 954,000	$ + 10,000

Program of Work:

The Resource and Land Investigations (RALI) Program provides the framework to mobilize the Department's technological capacity and capabilities in the application of multidisciplinary resource data, special information products, and information analysis techniques for the solution of priority problems facing modern land use and resource managers. The program will concentrate initially on the preparation of environmental guidebooks and technical manuals to facilitate the evaluation of alternative land use strategies, and to assess the environmental impact of chosen plans. The systems planning and designing effort for RALI, initiated in FY 1974 to define the overall program and develop performance requirements, will be completed in FY 1975.

The major effort in FY 1975 will include projects designed to respond to demands placed on the Department to support such things as pipeline legislation, the pending land use bill, and the critical need to improve National environmental impact analysis capability. Methodological guidebooks, focused on natural science considerations, will be published on: utility corridor selection, facility siting, development of State land inventories, evaluating areas of critical environmental concern, and procedure for evaluating environmental impact.

Status of Program:

The RALI Program has been established as a Departmental program, and the Geological Survey has been designated lead agency in developing and managing the program. FY 1974 saw the initial direct funding of the program, and the accomplishment of the following basic program definition activities that set the stage for the projects to be undertaken in FY 1975:

1. The establishment of an organizational structure for the program and an initial planning staff,

2. The study of user needs for products and services at Departmental and Federal levels,

3. The initiation of discrete projects to produce technical guidebooks on topics of critical National concern,

4. The conduct of pilot studies to test field concepts on multidisciplinary research and product design.

5. The canvasing of States, cooperatively with the Council of State Governments, to ascertain their needs for data,

analytical services, and methodologies, and their opinions about Federal/State relationships relative to land and resource management,

6. The development of a working relationship with the Department's Office of Land Use and Water Planning to insure RALI's responsiveness to pending land use legislation.

12. Land Use Data and Analysis Program

FY 1974, $0; FY 1975, $2,509,000; increase $2,509,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$2,509,000	+10	$2,509,000	10	To acquire, compile, analyze and disseminate land use data.

Cost Factors Involved in the Increase

Funds for salary and benefits for 10 permanent positions at an annual rate of $18,000, $180,000; travel, transportation, printing, supplies, equipment, $158,000; other services, $2,171,000.

Need for Increase:

Information on existing land use and changes in land use over time is essential for planning better future uses of the land. Pending legislation, such as the National Land Use Policy and Planning Assistance Act, will increase the need for these data. Current land use data are also required by Federal, State and local governments for assessing damages from natural disasters such as floods, recreational planning, water resource planning, planning for energy development, transportation planning, and managing the public lands. A Federal program to systematically provide basic land use data can take advantage of recently developed advanced technology to collect and distribute these data and, in addition, would provide data classification uniformity, production efficiencies and economies of scale.

Program of Work:

The proposed program will provide systematic and comprehensive collection and analysis of land use data on a nationwide basis. It is designed to supply these data within a three to five-year time frame and provide for the periodic revision of the data.

The specific products to be provided by the Land Use Data and Analysis Program are:

1. Maps for the entire country at 1:250,000 scale showing the present use of the land using a classification system developed by the Geological Survey in conjunction with other Federal agencies, several states and other users.

2. Demonstration maps at 1:24,000 or 1:50,000 scale for selected critical areas and urban areas showing the present land use.

3. Computerized data on current land use and changes in land use over time.

4. Statistical analyses of land use patterns, trends, and changes.

Land use data will be compiled by political and administrative units, classes of public land ownership, river basins and sub-basins and statistical units such as census tracts.

Because of the dynamics of land use the emphasis in the preparation and distribution of all products will be on supplying the information to the users in the shortest possible time. Applied research in data and information requirements, inventory methods, and data use, as well as interpretative studies will also be carried out under the program in order to more effectively apply current land use and other data to land use planning.

The schedule for the compilation of land use data assigns highest priority in FY 1975 to areas undergoing rapid urbanization and related development, and to other environmentally critical areas. Approximately 500,000 square miles will be completed in FY 1975. It is planned to complete first time coverage of the country by FY 1978.

The program beyond FY 1977 will provide for revision of the land use data on a 3 to 10-year interval, depending on the pace at which land use is changing.

The program will use the advanced technology at the Special Mapping Center, high altitude NASA photographs, aerial photographs acquired for the Topographic Division's orthophotoquad mapping program, and space acquired ERTS data that will be useful for monitoring changes in land use and indicating areas where revision is needed.

Status of Program:

Data concerning current land use are one of the basic inputs to a variety of planning activities and decision-making processes. The present distribution of agricultural, recreational and urban land; knowledge of how and where urbanization and other development has been occurring; and data on the proportions of a given area recently devoted to different uses are used by legislators and state officials to determine land use policy, and by planners to project transportation demand, identify areas where future development pressure will be greatest, estimate future infrastructure requirements, and develop more effective plans for regional development.

Current land use data are also needed by the Federal government for assessing damages from natural disasters such as floods, recreational planning, water resource planning, planning for energy resource development, and managing public lands. For example, comprehensive inventories of existing uses of public lands plus the existing and changing uses of adjacent private lands can contribute to improved management of the public lands. In addition an overview of current land use and changes in current land use is needed for continuing evaluation of public policy (and the monitoring of the effects of policy and legislation) including such aspects of policy as that dealing with national land use planning, coastal wetlands and other environmentally critical areas, impacts of transportation systems, and agricultural production.

Existing sources and procedures have serious limitations in meeting the increasing national, state, and local demand for current land use data. The

data lacks uniformity from area to area including incompatible classification systems. The coverage is very spotty with a considerable portion of it being out of date or non-existent.

For detailed planning at the local level, ground surveys occasionally supplemented by aerial photographs have generally been used. In other cases, land use data are hypothesized on the basis of utility hookups, school population, building permits, and similar information. Some States such as Connecticut, New York, and Minnesota have land use information available on maps at scales ranging from 1:24,000 to 1:500,000, but in most cases these States have not been able to update land use maps regularly; therefore, the data have decreasing value.

Some Federal agencies, such as the Forest Service, Soil Conservation Service and Bureau of Land Management, collect some land use data for specific needs, but it is difficult to adapt such data to other uses. Some data have often been collected on a one-time basis so the data are of marginal utility for other applications. Furthermore, it is nearly impossible to aggregate the available data because of the differing classification systems used. At present there is no way to make land use comparisons from one data source with those from another source, except in the most general way

The proposed program will capitalize on a number of developments. The Geological Survey has developed a two-level land use classification system for use with remote sensor data that makes provision for additional levels of detail. The first two levels have been defined and found suitable for many Federal and many State needs. The States, local governments or Federal agencies can define the third and fourth levels for greater detail to meet their specific requirements provided these levels can be aggregated into level II for overview purposes. This system has received considerable support from States and from Federal agencies since its proposal in late 1972. Approximately 20 States have indicated a willingness to adopt the system.

Several other experiments in the collection and display of land use data in the Central Atlantic area, in Arizona, and in selected cities are also being carried out in cooperation with NASA. Successful testing of the basic program concepts and techniques has occurred through a cooperative program with the Ozark Regional Commission to produce land use information which is being made available in both conventional map formats and computer produced graphics and tabulations.

PERSONNEL SUMMARY

	Actual 1973	Estimate 1974	Estimate 1975
Total number of permanent positions	5,839	5,857	6,477
Full-time equivalent of other positions	717	722	772
Average number of all employees	6,414	6,579	7,249
Average GS grade	9.6	9.6	9.6
Average GS salary	$15,928	$16,676	$16,676
Average salary of ungraded positions	$12,452	$13,074	$13,074

ITEMIZATION OF ESTIMATE

Department of the Interior
Appropriation Title: Surveys, Investigations, and Research

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) or Decrease (-)
Program and Financing				
Total obligations	$149,971,162	$170,972,758	$230,876,000	$+59,903,242
Recovery of prior year obligations	-4,312	-42,000	-5,000	+37,000
Unobligated balance available, start of year	-1,279,776	-428,758	-400,000	+28,758
Unobligated balance available, end of year	428,758	400,000	400,000	--
Unobligated balance lapsing	270,168	--	--	--
Budget authority	149,386,000	170,902,000	230,871,000	+59,969,000
Budget authority:				
Appropriation	150,450,000	170,902,000	230,871,000	+59,969,000
Transferred to other accounts	-1,064,000	--	--	--

(In thousands of dollars)

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) or Decrease (-)
Obligations by Objects				
11 Personnel compensation	$ 94,276	$ 100,184	$ 114,150	$ +13,966
12 Personnel benefits	8,859	10,108	11,686	+1,578
13 Benefits for former personnel	5	24	7	-17
21 Travel and transportation of persons	4,665	4,922	6,196	+1,274
22 Transportation of things	2,010	1,974	2,554	+580
23 Rent, communications, and utilities	6,947	11,621	26,514	+14,893
24 Printing and reproduction	2,179	2,097	2,667	+570
25 Other services	15,543	24,980	47,110	+22,130
26 Supplies and materials	7,669	7,324	8,860	+1,536
31 Equipment	6,300	6,791	10,080	+3,289
33 Investments and loans	248	121	5	-116
41 Grants, subsidies and contributions	560	776	1,025	+249
42 Insurance claims and indemnities	25	25	25	--
Allocation to General Services Administration Facilities	686	29	--	-29
Subtotal	149,972	170,976	230,879	+59,903
Quarters and subsistence charges	-2	-3	-3	--
Total obligations	149,970	170,973	230,876	+59,903

Authorization for Purchase of 32 Passenger Motor Vehicles, for Replacement Only

The vehicles requested are used to transfer men and equipment over all types of roads and terrain and in all kinds of weather, in the conduct of the field work of the Geological Survey. These vehicles must provide dependable service at all times, since a great deal of the transportation required is in areas where repair services are not available. Field use tends to shorten the efficient life of a vehicle.

The 32 vehicles to be replaced, as shown below, will meet or exceed the age or mileage replacement standards prescribed by the General Services Administration, and can no longer give dependable and economical service. The vehicles will be used in areas not serviced by vehicle pools maintained by the General Services Administration.

	Sedans	Station Wagons	Total
Replacements based on:			
Mileage			
60,000 - 80,000	-	5	5
80,000 or over	5	7	12
Age	8	7	15
Total	13	19	32
Total passenger vehicles owned by Geological Survey	51	108	159

Miscellaneous Services to Other Accounts

Miscellaneous services performed for other Federal agencies and the public, on a reimbursable basis, by central services units of the Geological Survey are summarized below:

	(Dollars in thousands)		
	Actual 1973	Estimate 1974	Estimate 1975
Electronic data processing and related services	$1,991	$2,415	$2,660
Map reproduction services for other agencies	97	115	122
Sale of maps to other agencies	365	356	384
Sale to the public of photographs and copies of records (43 U.S.C.45)	47	42	46
Property maintenance services and sale of material from stock to other Federal agencies	76	65	66
Total central services reimbursable program	2,576	2,993	3,278

Central Services and Consolidated Accounts

Services to Geological Survey programs, similar to those rendered to other agencies, as well as motor vehicle fleet operations and other common-use services, are financed for reasons of economy through central service and consolidated accounts. Charges initially made to these accounts are ultimately charged to the activity benefited.

The actual costs of these services for 1973 and the estimates for 1974 and 1975 and their distribution by activity, are summarized below:

	(Dollars in thousands)		
	Actual 1973	Estimate 1974	Estimate 1975
Central Services			
Electronic data processing and related services	$6,168	$7,125	$7,293
Map reproduction	4,331	3,740	4,040
Editing and illustration of publications	3,479	3,481	3,761
Distribution of maps and reports, response to public inquiries and related functions	3,846	4,205	4,539
Property maintenance and instrument development	654	656	755
Payroll services to other bureaus	40	--	--
Total central services	18,518	19,207	20,388

Consolidated Accounts	(Dollars in thousands) Actual 1973	Estimate 1974	Estimate 1975
Motor vehicle fleet operations	$ 923	$ 900	$ 900
Rental and maintenance of certain facilities at headquarters and field centers	1,785	1,977	1,760
Warehouse stock of common-use supplies and materials	724	1,124	1,289
Survey's proportionate share of departmental charges, Safety Committee and contingencies arising from operation of field centers	549	826	762
Total consolidated accounts	3,981	4,827	4,711
Grand total	22,499	24,034	25,099

Distribution by activity:	(Dollars in thousands) Actual 1973	Estimate 1974	Estimate 1975
Topographic surveys and mapping	$6,872	$7,024	$7,382
Geologic and mineral resource surveys and mapping	6,391	6,619	6,953
Water resources investigations	4,485	4,749	4,822
Conservation of lands and minerals	888	1,431	1,482
Earth resources observation systems	498	362	290
General Administration	789	856	892
Miscellaneous services to other accounts	2,576	2,993	3,278
Total	22,499	24,034	25,099

BUREAU OF MINES

Budget Request--1975

The programs and plans presented in the FY 1975 budget reflect the Bureau of Mines responsibility to help assure the effective utilization of natural mineral and fuel resources in the best interests of the Nation's social, economic, and security requirements. To this end, the Bureau's programs have not been static but rather have undergone changes responding to national needs. The Bureau's mission is not only directed toward helping assure adequate minerals and fuels to meet current and future requirements at reasonable costs, but also toward achieving these material needs without objectionable environmental and social effects.

The principal emphasis in programs proposed for increase in fiscal year 1975 is on energy research and development. The President, in his energy message of January 23, 1974, stressed the need for greater research efforts by both industry and the Government if we are to see the successful culmination of "Project Independence." The budget increase reflected here will provide the Bureau with the funds necessary to carry out its part of the first year of the President's five year energy R & D program.

The fiscal year 1975 budget request for the Bureau totals $212,347,000. This includes $103,500,000 for an accelerated energy research and development program and $108,847,000 to continue the Bureau's regular programs. The estimate is distributed by activity as follows:

($ in thousands)

	FY 1974 Amount Available	FY 1975 Regular Budget	FY 1975 Accelerated Energy Budget	Net Change
Energy Research	23,811	25,208	55,900	+ 57,297
Metallurgy Research	16,272	16,598	3,300	+ 3,626
Mining Research	43,783	45,450	44,300	+ 45,967
Data Collection and Analysis	11,357	12,343	--	+ 986
Engineering, Evaluation, and Demonstration	8,992	7,731	--	- 1,261
Program Administration	1,391	1,517	--	+ 126
Total	105,606	108,847	103,500	+ 106,741

$81,108,000 for Energy Research

An increase of $57,297,000 is requested for expanded research and demonstration of technology designed to supply clean energy from domestic resources. The Bureau's research is conducted under three main headings--coal, oil shale, and petroleum and natural gas.

Coal - It has been evident for several years that coal, of which there are ample, reliable reserves, can do much to close the gap between energy demand and supply in this country. To do this in the near term, without adverse environmental impacts, it will be necessary (1) to convert coal to nonpolluting liquid and gaseous fuels and (2) to learn how to burn coal in boilers more efficiently and

without exceeding air pollution emission standards. Accordingly, the major emphasis in 1975 will be on coal gasification and coal liquefaction.

Pipeline gas now supplies one-third of the Nation's energy and is the cleanest-burning fuel. The scaleup of Bureau processes for conversion of coal to pipeline gas will be accelerated, including the Synthane, Hydrane, and stirred-fixed-bed processes. Process development for conversion of coal to clean liquids will also be accelerated. Two Bureau processes are particularly promising - Synthoil and COSTEAM. Production of alcohols and Fischer-Tropsch fuels from coal will also be investigated. Finally, basic chemical and engineering data, which are greatly needed to ensure reliable operation and improve all coal conversion processes, will be established.

Oil Shale - Timely and efficient development of an oil shale industry depends largely on solving a variety of problems, some in legal and policy areas and some in technologic and economic areas. The Bureau's oil shale program, although technically oriented in the direct sense, bears on each of these problem areas by (1) developing technical information needed by Government for effective administration of the public oil shale deposits that constitute about 80 percent of the total resource of primary interest, and (2) providing advanced scientific and engineering information needed to expedite improvement of existing processes and development of new ones.

The program in fiscal year 1975 will include acquisition and evaluation of oil shale samples, primarily from Government lands that have potential for early development; laboratory and bench-scale experimentation on hydrogenation and other advanced means of processing oil shales and shale oils to yield superior liquid and gaseous products; and a coordinated laboratory, engineering-scale, and field-test effort directed toward development of in situ methods of producing shale oil.

Petroleum and Natural Gas - The most effective short-term answer that research can offer to solve the energy problems facing the nation is to develop the capability to recover petroleum and natural gas already located but unproducible by methods now in use. Approximately 425 billion barrels of crude oil have been discovered in the United States, but about 290 billion barrels of it still remain in the ground after application of conventional recovery techniques. This 32-percent recovery leaves a large amount of oil as a target for advanced recovery processes. For natural gas, the greatest untapped resource lies in the dense (low-permeability) formations from which gas flows too slowly for economic development. An example is the 600 trillion cubic feet of gas that is locked in tight, low-permeability formations in deep Rocky Mountain basins. Another target area for increasing production through stimulation is some 191 billion barrels of heavy oils and bitumens in tar sands not producible by economic methods.

In 1975, major emphasis will be on research to develop and demonstrate the technical feasibility and economic practicability of known stimulation methods for increasing oil and gas recovery; and on increasing the efficiency of utilizing the heavy ends of petroleum and asphalt, recycling of waste lubricating oil, and improving the processing and utilization of petroleum and products.

$19,898,000 for Metallurgy Research

An increase of $3,626,000 is requested to accelerate research dealing with:

-- Potential for energy conservation in mineral and metallurgical processing operations.

-- Low-grade uranium processes. Processing methods to recover uranium from low-grade resources.

-- Development work on the Bureau's citrate process for removing sulfur dioxide from smelter stack gases.

The general purpose of the Metallurgy Program is to help improve the Nation's minerals and metals posture. Research and development are directed to provide the scientific and technical information necessary to encourage and stimulate the minerals industry to make the expeditious advances in technology that will result in adequate and continuing supply of mineral raw materials at acceptable material and energy costs and with a minimum of waste and environmental degradation.

$89,750,000 for Mining Research

The major portion of the requested increase of $45,967,000 is for research on coal mining technology, intended to develop the improved mining systems needed to supply the greatly increased demand for coal. The research is directed toward upgrading existing technology for both surface and underground coal mining, and toward the development of new technology that will be needed to keep pace with projected requirements. It includes improvements in mine development to decrease the amount of time needed to bring a mine into production, and automation of longwall and continuous miners to improve productivity, and improvements in roof support and coal transportation methods in order to accommodate increased production. Subsidence, acid mine drainage, coal bed fires, solid waste, and surface reclamation are key factors in the environmental aspects of coal mining. Of particular interest is the development and demonstration of techniques for the recovery of methane in commercial grades and quantities from mined out areas and from virgin coal areas prior to mining. Such degasifying not only facilitates coal production by reducing the risk of methane explosion but also has the potential of making a significant contribution to the nation's energy resources

Health and safety research will continue to be aimed at improving the working conditions in mines and achieving maximum conservation of human resources. This research is concerned with health-related factors involving respirable dust, radioactive minerals, noxious gases, toxic materials and noise, and with safety problems involving fires, explosions, ground control and support, materials handling, transportation, illumination, and communications. The ultimate goal is development of advanced complete mining systems which will be inherently safe.

$12,343,000 for Data Collection and Analysis

The funds requested under this heading will be used to compile and analyze technical and economic data on mineral resources, as well as on production and consumption of important mineral commodities. Such statistical information can help anticipate changes in mineral supply and demands patterns. Moreover, it is a valuable planning guide for Bureau research and a useful source of knowledge for Federal policymaking in energy and minerals. The 1975 program emphasizes improved world statistics and better data on nonenergy minerals.

$7,731,000 for Engineering, Evaluation, and Demonstration

The above amount is requested for programs relative to the environmental impact of mineral conservation, development, and use. In fiscal 1975, the Bureau will continue its research and demonstration work on restoration of mined land, controlling subsidence caused by underground mining, and fires in abandoned coal mines and in inactive deposits. Also, we will continue evaluating the mineral development potential of areas covered by the Wilderness Act.

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$1,517,000 for Program Administration

The sum of $1,517,000 provides for the executive direction and part of the administrative services for the Bureau. The balance of the cost of administrative services is charged to program funds appropriated directly or transferred from other agencies. In addition, this activity provides funds to reimburse the Bureau of Employee Compensation, Department of Labor, for payments made because of injury or death of employees.

BUREAU OF MINES
Summary Energy Research and Development Analysis 1/
Mines and Minerals
(In thousands of dollars)

Activity	FY 1974 Amount Available	FY 1975 Regular budget	FY 1975 Budget Amendment H.D.	FY 1975 Total Request	Increase (+) or decrease (-) 1975 compared with 1974
Energy:					
Coal	14,746	15,388	41,700	57,088	+42,342
Petroleum	6,515	6,925	14,100	21,025	+14,510
Oil shale	2,550	2,895	100	2,995	+ 445
Mining:					
Advancing coal mining technology	7,500	7,800	38,700	46,500	+39,000
Advancing oil shale mining technology and waste management	- -	- -	5,600	5,600	+ 5,600
Metallurgy (Energy)	800	600	3,300	3,900	+ 3,100
Special Energy Studies	1,500	- -	- -	- -	- 1,500
Subtotal, Energy R&D	33,611	33,608	103,500	137,108	+103,497
All other activities	71,995	75,239	- -	75,239	+ 3,244
Total, Mines and Minerals	105,606	108,847	103,500	212,347	+106,741

1/ This table shows the relation of the FY 1975 budget amendment for the accelerated energy R&D program to the FY 1975 regular budget request and the FY 1974 amount available.

Appropriation, 1973		$92,842,000
Transferred from Geological Survey for increased pay costs		22,000
Transferred to "Operating Expenses, Public Buildings Service," General Services Administration		-36,908
Total Available, 1973		92,827,092
Appropriation, 1974	$99,100,000	
Supplemental Appropriation, 1974	2,300,000	
Pay Cost Supplemental (January and October pay raises)	4,206,000	
Total Appropriation, 1974		105,606,000

Summary of Increases and Decreases, 1975

	Base for 1975	Increase 1975	
Energy:			
Accelerate development of conversion of coal to pipeline gas (high Btu)	$7,400,000	$+14,800,000	
Accelerate scaleup of coal liquifaction processes	1,879,000	+25,509,000	
Provide basic research data on chemistry of coal and conversion processes	2,200,000	+ 1,000,000	
Combustion of low Btu gas for use in combined power cycles/gas turbines	400,000	+ 900,000	
Investigate potential environmental problems associated with in situ retorting of oil shale	2,595,000	+ 400,000	
Stimulation of petroleum and gas production	3,600,000	+13,400,000	
Initiate tar sand and heavy oil field recovery projects	3,025,000	+ 1,000,000	+57,009,000
Metallurgy:			
Research to permit use of high sulfur coal as a replacement for oil and gas in powerplants	100,000	+ 1,900,000	
To determine energy use patterns in metallurgical processing		+ 500,000	
To expand uranium extraction capability to meet projected demand for nuclear fuel used for electricity	200,000	+ 900,000	3,300,000

	Base for 1975	Increase 1975	
Mining:			
Research on safety and health problems in metal and nonmetal mines	4,324,000	+300,000	
Development and demonstration of improved coal mining technology	7,800,000	+38,700,000	
Conduct studies and research to aid in future development of oil shale	--	+ 5,600,000	+44,600,000
Data Collection and Analysis:			
Improve world statistics on mineral consumption and recycling, identify and analyze nonenergy mineral problems	3,238,000	+ 1,700,000	
To reduce energy data collection and analysis program, now planned for funding from FEO	4,500,000	- 1,500,000	+ 200,000
Engineering, Evaluation, and Demonstration:			
Mined land investigations and demonstration program	4,766,000	- 996,000	
Research on filling critical mine void areas	700,000	- 700,000	- 1,696,000
Program Administration:			
Employee Compensation Payments	1,391,000	+ 28,000	+ 28,000
Annualization of October 1973 Pay Raise	--	740,000	
Allowance for Leased Space	--	2,560,000	3,300,000
Net Increase, 1975			+106,741,000
Budget Estimate, 1975			212,347,000

MINES AND MINERALS

Analysis by Activities

Activity	F.Y. 1973 Amount Available	Fiscal Year 1974			
		Total Appropriation	Pay Cost Supplemental	Transfer 1/	Amount Available
1. Energy	$19,231,571	$23,306,885	$1,015,000	- -	$24,321,885
2. Metallurgy	15,366,555	15,193,000	1,079,000	- -	16,272,000
3. Mining	36,779,114	42,650,000	1,133,000	- -	43,783,000
4. Data collection and analysis	9,482,028	10,763,000	594,000	- -	11,357,000
5. Engineering, evaluation, and demonstration	9,835,972	8,696,000	296,000	- -	8,992,000
6. Program administration	1,224,920	1,302,000	89,000	- -	1,391,000
Unobligated balance, start of year	- -	-510,885	- -	- -	-510,885
Unobligated balance, end of year	510,885	- -	- -	- -	- -
Unobligated balance lapsing	396,047	- -	- -	- -	- -
Total	92,827,092	101,400,000	4,206,000	- -	105,606,000

MINES AND MINERALS

Analysis by Activities

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974	Page Reference
1. Energy	$19,231,571	$24,321,885 1/	$81,108,000	$56,786,115	20
2. Metallurgy	15,366,555	16,272,000	19,898,000	3,626,000	34
3. Mining	36,779,114	43,783,000	89,750,000	45,967,000	51
4. Data collection and analysis	9,482,028	11,357,000	12,343,000	+ 986,000	74
5. Engineering, evaluation, and demonstration	9,835,972	8,992,000	7,731,000	-1,261,000	81
6. Program administration	1,224,920	1,391,000	1,517,000	+ 126,000	89
Unobligated balance, start of year	- -	-510,885	- -	+ 510,885	
Unobligated balance, end of year	510,885	- -	- -	- -	
Unobligated balance lapsing	396,047	- -	- -	- -	
Total	92,827,092	105,606,000	212,347,000	106,741,000	

1/ Includes $510,885 of unobligated balance brought forward from FY 1973.

Explanation of Language and Activity Changes

Secretarial Order No. 2953, dated May 7, 1973, established within the Department of the Interior a new organizational entity entitled "Mining Enforcement and Safety Administration," (MESA) and made it responsible for administering certain functions under the Federal Coal Mine Health and Safety Act of 1969 (P.L. 91-173) and the Federal Metal and Nonmetallic Mine Safety Act (P.L. 89-577). Specifically, the order transferred from the Bureau of Mines to MESA the following budget functions: (1) coal mine inspections, (2) metal and nonmetal mine inspections, (3) education and training, and (4) technical support.

Pursuant to Order No. 2953, it was necessary to restructure the appropriation entitled "Mines and Minerals, Bureau of Mines" to exclude from the appropriation language and the activity structure those functions transferred to the Mining Enforcement and Safety Administration. The language also was reworded somewhat to more accurately describe work authorized and performed by the Bureau of Mines.

The Bureau recommends that those funds requested for health and safety research and energy R & D remain available until expended. The principal basis for this recommendation is that a no-year appropriation is more compatible with performance under long-term contracts. In previous years, the Bureau's work primarily was performed in its own research centers and laboratories with Bureau personnel.

The appropriation request for FY 1975 includes large sums for research contracts. The funds requested for the accelerated energy R & D program are primarily for research contracts. Also, a large portion of the mining health and safety programs will be performed under contracts.

Some of the problems associated with funding research contracts from one-year appropriations are:

(1) The fiscal year-end deadline creates a number of severe procurement problems. The heavy year-end workload causes substantial overtime. Artifical pressure is generated on the negotiation process which could cause less than optimum results.

(2) Flexibility on the timing of contracts is unnecessarily constricted, creating potential degradation of the planning process prior to the procurement cycle.

(3) The use of one-year appropriations on multi-year contracts causes some questionable funding arrangements, particularly when contracts are modified in their "out-years" after the original appropriation authority has expired.

The Federal Coal Mine Health and Safety Act of 1969 (P.L. 91-173) is the basic authorizing legislation for a large part of the Bureau's health and safety research activity. This legislation (Section 501 (e)) provides for "no-year" funding for research activities.

Although there is no specific mandate for no-year funds for other programs, generally, however, no-year appropriations are used for project oriented functions normally requiring more than one year to complete. Major procurement, construction, and research and development are the most common activities financed from no-year appropriations.

1. Energy Research: Fiscal year 1974, $23,811,000; fiscal year 1975, $81,108,000; increase, $57,297,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	+ $14,800,000	30	$22,200,000	115	Accelerate development of conversion of coal to pipeline gas. (high Btu)
(2)	+ 25,509,000	45	27,388,000	148	Accelerate scaleup of coal liquefaction processes.
(3)	+ 1,000,000	20	3,200,000	154	Provide basic research data on chemistry of coal and conversion processes.
(4)	+ 900,000	5	1,300,000	29	Combustion of low Btu gas for use in combined power cycles/gas turbines.
(5)	+ 400,000	7	2,995,000	98	Investigate potential environmental problems associated with in situ retorting of oil shale.
(6)	+ 13,400,000	10	17,000,000	75	Stimulation of petroleum and gas production.
(7)	+ 1,000,000	2	4,025,000	142	Initiate tar sand and heavy oil field recovery projects.
(8)	+ 188,000		--		Annualization of pay increase granted in FY 1974 (E.O. 11789).
(9)	+ 100,000		--		Reimbursement for space provided by GSA in accordance with P.L. 92-313.
	+ $57,297,000	119			

COST FACTORS INVOLVED IN INCREASE

(1) Thirty permanent positions at an average annual rate of $15,000 (for 10 months) $375,000; personnel benefits, $32,000; travel of employees, $5,000; supplies and materials, $1,000,000; and contractual services, $13,388,000.

(2) Forty-five permanent positions, for an average of 10 months, $560,000; personnel benefits, $50,000; travel of employees, $8,000; supplies, materials, and equipment, $1,500,000; and contractual services, $23,391,000.

(3) Twenty permanent positions at an annual average rate of $15,000 (10 months) $250,000; personnel benefits, $20,000; travel, $3,000; supplies, materials, and equipment, $500,000; and contractual services,$227,000.

(4)Five permanent positions at an average annual rate of $15,000 (10 months) $65,000; personnel benefits, $6,000; travel, $3,000; supplies, materials, and equipment, $100,000; and contractual services, $726,000.

(5) Seven permanent positions at an annual rate of $15,000 (10 months) $90,000; personnel benefits, $8,000; travel, $10,000; supplies, materials, and equipment, $14,000; and other contractual services, $278,000.

(6) Ten permanent positions at an average rate of $15,000 (10 months) $125,000; personnel benefits, $10,000; travel, $20,000; supplies, materials, and equipment, $25,000; and contractual services, $13,220,000.

(7) Two permanent positions at an annual rate of $15,000, $30,000; personnel benefits, $3,000; travel, $3,000; supplies, materials, and equipment, $10,000; contractual services, $954,000.

NEED FOR INCREASE

Provide for expanded and accelerated R & D to achieve the near-term goal of using coal to make nonpolluting liquid and gaseous fuels, thereby conserving indigenous petroleum and natural gas resources, and contributing to national self-sufficiency in primary energy. Work will be conducted both in Bureau laboratories and through contracts with universities and industry.

(1) Conversion of Coal to Pipeline Gas (High Btu), $14,800,000:

The increase will provide for construction and operation of process development units (PDU) to obtain engineering and economic data on processes developed by the Bureau of Mines for conversion of coal to clean high Btu gas. Included are the Hydrane hydrogasification process; the unique Bureau stirred fixed-bed unit operated with oxygen; and processes for hydrogen generation. Some of the increase will be used to accelerate completion and startup of the large Synthane pilot plant scheduled for the fall of 1974. Also, a major effort will be made to provide supporting R & D information vitally needed for successful operation of all processes - materials of construction able to withstand high temperatures and corrosive atmospheres, equipment development, especially valves and apparatus capable of feeding coal and withdrawing char from pressure vessels, and basic engineering data such as for fluid beds operating at high temperature and pressure.

(2) Coal Liquefaction, $25,509,000:

The requested funds will provide for accelerated research and for construction and operation of process development units (PDU) for conversion of coal to clean liquids. Specifically, the funds will be used in program areas as follows:

1. Direct hydrogenation of coal. A PDU unit will be constructed to scaleup the Bureau Synthoil process (turbulent catalytic reactor) capable of processing 6 to 10 tons of coal per day (see figure 1). The Synthoil process has proved in the laboratory that even low-grade, high sulfur and ash coal can be converted into a premium quality fuel oil that can be burned in power and industrial plants without exceeding pollution emission standards. Fuel tests on Synthoil products will be demonstrated and research conducted to optimize conversion of selected fractions to gasoline and to hydrogen. Direct hydrogenation R & D will also

include scaleup of the COSTEAM process. The COSTEAM process converts coal to clean liquid fuel by reacting it with carbon monoxide and steam. In addition, a process will be developed for direct catalytic hydrogenation of coal using inexpensive catalysts.

2. Development work will be carried out on the production of liquids from coal by the catalytic conversion of CO and H_2 produced by gasification of coal. This work will include the production of synthetic oil by the Fischer-Tropsch process and the production of alcohol fuels, including methanol, from coal.

3. Basic chemical and engineering data will be established which are greatly needed to ensure and improve coal liquefaction processes.

4. Design a hydrogen process development unit.

(3) Basic Research on Chemistry of Coal and Conversion Processes, $1,000,000:

To provide for expanded and accelerated advanced hydrocarbon research to be conducted both in-house and cooperatively, primarily with universities. Conversion of coal to clean-burning liquids and gases using present technology will add significantly to the cost of these fuels. Basic research is the key to new second and third generation coal conversion and coal utilization processes that will be more efficient and less costly. The increased funds will permit: (1) intensive studies on the chemical and physical makeup of the coal molecule that will yield important clues on reaction mechanisms, on how sulfur and nitrogen are bound into the coal structure and on how to remove these and other impurities effectively and efficiently; (2) the development of new highly selective catalysts to speed up coal conversion reactions and of ways to minimize hydrogen pressures and requirements of conversion processes; (3) development of ways to feed coal into reaction vessels and ways to separate mineral residues from product oil; and (4) fundamental and exploratory research on the production from coal of hydrogen and methanol for fuel use.

(4) Combustion of Low-Btu for Use in Combined Power Cycles/Gas Turbines, $900,000:

To provide for design and testing of gas turbine combustors for combined power cycles that will burn low-Btu gas made from coal over a wide load range and will not discharge amounts of nitrogen oxides that exceed the emission standards.

(5) Investigate Environmental Problems Associated with In Situ Retorting Shale Oil, $400,000:

To provide full-level investigations initiated during the latter half of Fiscal Year 1974 concerned with potential environmental problems associated with in situ retorting of oil shale. Information in this area of concern is urgently needed to guide advance planning and optimum progress of the in situ retorting program. Important environmental questions that need to be answered concern the potential effects of oil shale that has been retorted in situ upon ground waters that subsequently pass through the retorted zones.

(6) Stimulation of Petroleum and Natural Gas Production, $13,400,000:

To provide for monitoring, evaluation, and analysis of field demonstration projects on fluid injection and fracturing of formation to increase oil and gas recovery. Contracts will be awarded to private industry to perform demonstration projects on methods to increase recovery of oil and gas. In addition, oil

recovery projects will be initiated in heavy oil and tar sand deposits. Scheduled for fully engineered and carefully designed projects on fluid injection recovery techniques are the following: (1) Thermal recovery, (2) byproduct CO_2 injection, and (3) solvent injection. Projects proposed for gas stimulation include massive hydraulic fracturing and deviated wells combined with hydraulic and/or chemical explosive fracturing. It is anticipated that as many as seven new demonstration projects will be initiated during the fiscal year. These demonstration projects were initiated with increased funds provide in fiscal year 1974.

(7) Oil and Gas Utilization, Heavy Oils Recovery, $1,000,000:

These additional funds will be used to increase the efficiency of utilizing the "heavy ends" of petroleum and asphalt, recycle waste lubricating oil, and improve the processing and utilization of petroleum.

PROGRAM STATEMENT

Our national economic life is vitally dependent upon an adequate and rapidly expanding supply of energy fuels which are environmentally acceptable. Recent international events have shown the dangers and costs of excessive reliance on imports of petroleum.

The Bureau of Mines energy programs are directed particularly at the development of technology to meet the national needs for clean energy from resources within national boundaries.

Principle areas of research and development are:

(1) Methods of stimulating oil and gas production, so as to recover more of these scarce native resources.

(2) Technology that will enable production of oil shale in harmony with the environment.

(3) Processes to convert coal to pipeline gas needed for home, commerce, and industry and to low-sulfur, low-Btu gas needed for industrial processing and generating electricity.

(4) Processes to convert coal to low-sulfur, low-ash liquids needed as fuels for industry and generating electricity, and also needed for conversion to gasoline.

(5) Methods for improving the efficiency and availability of coal-fired powerplants, and the technology for burning clean, coal-derived Synthetic fuels for generating electricity and heat.

(6) Technology for reducing polluting emissions from powerplants and for reclaiming mined land.

(7) Processes to convert organic wastes to low-sulfur, low-ash liquids needed as fuels for industry and generating electricity.

PROGRAM OF WORK

Coal: $57,088,000 (Increase, $42,209,000)

The construction phase of the Synthane coal gasification pilot plant will be completed; component testing and shake down runs will then be followed by test operation of the 75 ton per hour pilot plant for producing substitute natural gas (SNG) from coal. At the same time, process development studies will be pursued in the laboratory to improve the SYNTHANE process and to find ways to minimize the adverse environmental impacts associated with commercial coal-to-gas plants.

The HYDRANE process for making SNG from coal will be further developed. Process information will be obtained by operation of an integrated process development unit and plans to scale-up to pilot plant stage will be pursued.

Development efforts will continue on processes for making low-Btu gas from coal for use under power boilers. Major emphasis will be placed on gasification of coal in a fixed-bed gasifier that employs a stirrer to prevent agglomeration of the coal bed, and on fluid-bed gasification using the SYNTHANE gasifier. Other novel techniques include combustion-gasification in a single vessel, the use of heat pipes to supply gasification heat, and suspension gasification in which coal is carried into the gasifier in a stream of supercritical steam.

Studies of underground coal gasification (see figure 2) will continue, aiming to achieve maximum energy recovery in the beds to develop the most efficient means for preparing coal beds prior to ignition, to improve directional-drilling techniques, to determine the optimum borehole configuration, and to identify and solve any unanticipated environmental problems. The field investigation in the western coal bed, Hanna site, will continue, and other western coal beds which have significantly different geological characteristics will be investigated in the same manner, if time permits. Eastern coal beds, particularly thin beds, will be gasified using slant hole drilling. Laboratory studies will continue, aiming to provide knowledge that will improve underground coal gasification technology, particularly in the areas of site preparation, coal-bed permeability, and energy recovery.

Increased emphasis will be placed on converting coal to low-sulfur, low-ash fuel oil for power generation or as a feedstock for refined products. Further development of the SYNTHOIL process will be carried out through testing in a half-ton per day process development unit. Design of a four-inch inside diameter SYNTHOIL pilot plant will be completed in FY 74. Construction of this pilot plant will be started. In related work, research will be continued on ways to make hydrogen, which is necessary for the SYNTHOIL process and on ways to separate ash and other solid components from the product oil. Additionally, fundamental information will be obtained on the mechanism of coal liquefaction and the nature of the products.

Design of a small pilot plant to utilize the Bureau-development process to convert wood wastes to low-sulfur oil has been completed and construction is planned for FY 1975. Laboratory work will be carried out to further improve processes for conversion of organic wastes to oil and gas.

A new three-stage combustor will be used to study coal combustion to produce hot, clean gas suitable for use in advanced power cycles, including a magnetohydrodynamics generator. These conversion devices offer a means of generating electric power with increased efficiency over conventional coal-burning powerplants, resulting in less pollution and lower consumption of natural resources per unit of power.

Equipment and methods will be further developed for burning coals and process chars more efficiently. The causes of corrosion and ash fouling that occur in coal burning powerplants will continue to be studied and efforts made to ease these problems through better knowledge of the behavior of the mineral constituents in coal during the combustion process.

Burning tests will be made on "solvent-refined coal," a low-ash, low-sulfur fuel that results when coal is hydrogenated under specified conditions. The aim of these tests is to develop procedures for burning this fuel in powerplants efficiently and with maximum boiler availability.

The removal of sulfur dioxide from powerplant stack gases continues to be a difficult problem. State-of-the-art processes are plagued with plugging, scaling, erosion, and a severe solid waste problem. The Bureau has developed a process based on a dry solid sorbent which eliminates these problems, removes both SO_2 and NO_x (another troublesome air pollutant) and produces a saleable by product, elemental sulfur. Operation of a laboratory process development unit for testing this process will continue.

Use of soluble alkaline materials in lignite fly ash will be utilized to scrub combustion gases from western powerplants.

Ways will be sought to remove sulfur, ash, and trace toxic elements from coal prior to combustion, using conventional coal-washing techniques in a variety of circuits, and novel chemical techniques. Techniques will be developed for drying and safe storage of lignites and western coals.

New technology will continue to be developed to allow the use of marginal coals in blends for the production of metallurgical coke. The production of a metallurgical grade formcoke by continuous processing methods will be explored as a way to reduce pollution during coke making.

The program to encourage and guide coal companies, coal refuse bank owners and power companies faced with the responsibility of reclaiming strip-mined areas or spoil banks will continue. The results of treating coal mining waste areas with soil amendments such as commercial fly ash, fertilizer, cyclone furnace slag, and natural scoria will be continued to be monitored. Soil studies from various coal mine-related locations will be carried out, including determination of the need for trace nutrients, and of the toxic effects of trace elements.

Basic research will be continued on coal and coal-derived substances, to provide knowledge needed for new ideas, particularly in the areas of upgrading coal and converting it to other forms of energy, and furnishing solutions to energy environmental problems associated with coal utilization.

Oil Shale: $2,995,000 (Increase, $400,000)

Research will be performed to develop and improve the technology required to produce clean end-use fuels from shale oil or oil shale that will meet the needs of the Nation's changing energy-mix pattern thus assisting an oil shale industry to provide a meaningful share of the projected energy requirements in the early 1980's. Work also will be conducted to extend knowledge about the character of the oil shale deposits in Colorado, Utah, and Wyoming as a means of determining applicability of various processing techniques to recovery of maximum energy values from particular portions of the resource and to assist both Government and industry in planning the development of potential sites.

Hydrogen processing and associated techniques for producing liquid and gaseous fuels from shale oils, particularly those oils produced by in situ retorting, will be studied. Research will continue to establish the potential and technical feasibility of in situ oil shale gasification, and to develop means for

hydrogasifying in situ shale oil to produce pipeline quality gas. Hydrogasification work will be expanded to include a two-reactor system as well as a single-reactor system. The two-reactor system is expected to reduce the amount of catalyst deposit during gasification. Catalytic gasification studies of in situ oil using steam as a means of decreasing hydrogen requirements and reducing coke deposits will be continued. Bench-scale studies of direct gasification of oil shale to produce a satisfactory fuel gas, and of consecutive retorting and gasification without intermediate collection of liquid products will be performed. Catalytic hydrofining experiments with in situ oil to prepare a synthetic crude that has low sulfur and nitrogen content and is suitable for further refining to motor fuels by catalytic cracking and reforming will be continued.

Techniques for characterizing shale oils from various retorting and refining processes will be developed or improved as needed. Characterizational data will be obtained on shale oils to further the development of innovative techniques for both their production and their conversion to acceptable end products. To this end, liquid charge stocks and liquid products will be characterized in cooperation with retorting and refining engineers to help them meet the objectives of their projects. Cooperative consultation will also be provided to the underground coal gasification project with respect to characterizing the coal tars collected in that experiment.

Acquisition and evaluation of samples of oil shales from government-owned lands that have potential for early development will be continued. Results will be correlated for subsequent use in planning land use. Emphasis will be placed on filling gaps in data on shales in the Piceance Creek Basin of Colorado, the Green River Basin in Wyoming, and the Uinta Basins in Utah.

Major emphasis in the oil shale research will be directed to the development of technically feasible in situ retorting processes. This effort will include laboratory research, engineering-scale simulated in situ retorting tests in aboveground equipment, and actual field in situ experiments.

Specific work to be performed in FY 1975 includes continued development of improved oil shale fracturing techniques at a field site near Green River, Wyoming, and operation of an underground processing and recovery experiment in oil shale at a newly developed site near Rock Springs, Wyoming. In support of the field research, engineering data necessary for the development of technically feasible retorting options will be derived using relatively small equipment so that results can be obtained quickly and inexpensively to guide future field tests. Major parameters needed for the design and development of shale oil recovery processes will be delineated. Rate data for shale oil production and oil transport will be obtained in support of both the engineering and field in situ research to answer questions on the mechanism of condensation and transport of the condensed oil through raw shale and to supply input to mathematical models that are being developed to describe various phenomena associated with retorting. As these models are completed they will be combined with the ultimate objective of developing a mathematical model of the entire retorting process. Associated with this research is the continued application of NMR rapid assay techniques to oil shale to provide input for project evaluation. This technique is also being developed for application to tar sand, coal, and asphalt research projects conducted at the Laramie Energy Research Center.

Complementing the in situ processing experimentation, environmental aspects associated with the in situ approach will receive increasing attention. Important questions to be answered include the potential effects of subsurface spent shale upon ground waters that are associated with the shale or subsequently pass through the spent material. Ground water quality will be monitored before, during, and following various in situ retorting operations in order to determine the water contamination effects that may result and to derive methods of coping

with such problems. In situ leachability of spent shales as a function of the underground retorting temperature will be an important parameter to be investigated. Also of potential environmental consequence, the extent and mechanisms of underground migration of oil and gas products produced in situ will be investigated more intensively, as will be the air pollution potential of in situ produced gases as related to operating conditions.

The industry sponsored retorting program involving leasing of the Bureau's oil shale facility near Rifle, Colorado, will be monitored, and the Bureau will participate in environmental aspects of the program. All forthcoming information will be provided for Government use and general public release through publication.

Petroleum and Natural Gas: $21,025,000 (Increase, $14,400,000)

New methods and combinations of existing methods will be field-tested as a means of stimulating the production of petroleum from known deposits. Among the secondary and tertiary methods to be considered are waterflooding (with and without chemical additives); thermal methods (cyclic steam injection and steam drive, hot-water injection, and forward and reverse in situ combustion); micellar, polymer, and emulsion injection; and combinations of the above. Tests will be conducted with industry cooperation, using industry wells and properties.

Other field tests will involve cooperation with explosives companies, major and independent oil producers, and oil well service companies to: (1) Conduct fracturing tests combining hydraulic fracturing and chemical-explosive fracturing to stimulate oil and gas production from low-permeability deposits at moderate depths; (2) conduct feasibility study of utilizing massive hydraulic fracturing for stimulating gas production from deep, thick, low-permeability deposits in Rock Mountain basins and make field tests (see figure 3); and (3) conduct experiments with hydraulic and/or chemical-explosive fracturing in wells deviated from vertical to intersect natural fractures for stimulating gas production from low-permeability deposits.

The use of surface radiation measurements will be tested in the field as a direct method for locating oil and gas deposits. Research will continue on the relationship of reservoir geochemistry and the reservoir rocks and fluids. The characterization of the heavy ends (high-boiling material) from a selected number of crude oils will be completed.

Research on the use of solvent extraction for producing heavy oils by a line-drive method in a field test in Eastern Kansas and by a cyclic injection and production method in wells in California will be continued and applied to additional wells with improved technology. Research on characterizing Utah tar sands will be expanded. Laboratory research on development of a reverse in situ combustion bitumen recovery method will be completed. In cooperation with the Utah Geological and Mineralogical Survey, a site will be selected and procured for a field test and the test will be designed.

The installation of emission controls in recent production models of automobiles has meant a marked increase in gasoline consumption per miles traveled. Further penalties are expected with the 1975-1976 controls. Research will be continued on the determination of the best combination of fuels and engine configurations that will reduce or eliminate these short-comings, without any loss in emission control. Representative production models will be tested in programmed operating cycles, as well as prototype models. Tests will be completed on blends of methyl alcohol and gasoline as automotive fuel.

Efforts will be made to expand and refine the reference data bank of unique crude oil and weathered crude oil characteristics for identification of possible oil spills. The data bank will include characteristics for major domestic crude

oils as well as imported crude oils carried in tankers.

After use, a large proportion of lubricating oil must be disposed of as waste. Such disposal often creates pollution. One or more improved processes for reclaiming waste oil will be tested in a pilot plant. Reclaimed oils that will meet laboratory test specifications will be compounded into high quality automotive oils and full scale engine tests will be performed on them under contract to a competent testing facility. Development of systems to recycle this oil not only will reclaim a valuable resource but will eliminate a source of pollution.

Research on improved technology for injecting waste liquids into subsurface formations as a potential source of fluids for tertiary oil recovery will continue. Prior research has indicated that with proper treatment and control industrial or municipal waste fluids can be injected in subsurface porous formations. Such fluids with adequate treatment may also serve as a fluid injection medium in oil recovery projects thus serving a two-fold purpose.

EXAMPLES OF RECENT ACCOMPLISHMENTS

Construction of the Synthane pilot plant proceeded on schedule, and is expected to be completed September 1974. The Synthane process, developed by the Bureau of Mines, gasifies any kind of coal with oxygen and steam to produce substitute natural gas. The pilot plant will provide data essential to demonstrate the feasibility of scaling the process up to a commercial plant capable of producing 250 million cubic feet of gas daily. Laboratory and process engineering studies continued to furnish refinements to the Synthane process, particularly in the areas of environmental control and improved economics.

Laboratory and process development studies progressed on the Bureau of Mines Hydrane process to the extent that additional data essential for designing a pilot plant were obtained. Like the Synthane process, this process also converts coal to substitute natural gas, but differs in that the coal reacts directly with hydrogen, and produces a raw gas that is richer in methane. Preliminary cost studies indicate that the Hydrane process may offer even further economics in converting coal to substitute natural gas.

Very favorable laboratory results were obtained in converting high-sulfur coal to low-sulfur fuel oil by the novel Bureau of Mines Synthoil process. A process development unit capable of converting eight tons of coal to 24 barrels of low-sulfur oil daily is being designed; the design should be completed by June 1974. In this process, coal is mixed with an oil derived from the process, hydrogen is added, and the mixture passes through a fixed bed of cobalt molybdate under extremely turbulent conditions. Coal containing nearly five percent sulfur was converted to a liquid having fuel oil quality and only 0.17 percent sulfur. When burned to generate electric power, such an oil would easily meet the emission standards for sulfur dioxide.

The underground coal gasification investigation in a 30-foot-thick coalbed near Hanna, Wyoming, progressed to the extent that about 750,000 cubic feet of low-Btu gas were generated daily. Efforts are being made to increase the yield and quality of the gas and to achieve steady operating conditions. A new concept in underground coal gasification was proposed by Bureau engineers. Designated as the "longwall generator," the ultimate goal of such a system would be to obtain high gasification efficiency at lower costs. Successful development of underground coal gasification would have several benefits, the most important being the elimination of environmental and health and safety problems associated with coal mining, and a near-term substitute for oil and natural gas in powerplants.

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Under the Bureau's ongoing oil-shale program, characterization work kept pace with requirements of the recently announced Departmental Oil Shale Leasing Program. Cores from Colorado tracts were analyzed and evaluated and a Wyoming core is now under study. A number of drill cutting samples from both Wyoming and Utah also are being analyzed.

Refining research included completion of recent experimentation and evaluation of results on three related subjects: Production of a high-quality syncrude (that is, a shale oil upgraded to pipeline quality by hydrogenation), characterization of this syncrude, and catalytic reduction of nitrogen in a shale-oil gas oil.

In the in situ retorting program directed toward oil production, preparation of a site for a new field test near Rock Springs, Wyoming, progressed satisfactorily. Fracturing of the formation is under way, flow and other evaluation tests are in progress, and necessary equipment and piping is being assembled. Concurrently, work with aboveground equipment in simulation of in situ retorting has continued with a series of experimental runs in a ten-ton retort recently being completed. A run also was completed in smaller equipment designed to determine the mechanisms involved in retorting large blocks of shale such as are characteristic of in situ retorting installations.

Transfer of the Bureau's experimental oil-shale facility near Rifle, Colorado, to Development Engineering Incorporated under a lease agreement was completed in December 1973. Actual operations are projected for mid-1974. Under terms of the agreement, as provided for by Public Law 87-796 (76 Stat. 904-906), DEI and a group of at least 16 industry sponsors plan to conduct several years' research and development on a retorting system at a cost of $7.5 million to be borne entirely by the lessee and the industry group. Government, in consideration of making the facility availability, will receive all data, rights of publication, free use of all patents that result from the program, and agreement for general licensing of patents to others on a reasonable royalty basis. The retorting system to be considered is patterned to a large degree after the Bureau of Mines gas combustion system with several modifications in mechanical details and operating techniques that DEI anticipates will effect considerable improvement in heating efficiency and throughput capacity for a vien size unit. R and D also will be conducted on environmental considerations involved in oil-shale processing, including techniques for proper control of potential pollutants.

Progress was made during the year in experiments aimed at utilizing natural fracture systems in oil- and gas-bearing reservoirs to achieve better recovery of these vital fuels. In one field trial, a well was drilled at a 40-degree angle in an attempt to intersect as many natural fractures as possible. On completion, the well delivered over 100,000 cubic feet of gas daily under test from an area that had formerly been nonproductive.

Research continued on problems being encountered at waterflooding operations in California's Wilmington oil field. As a result of the Bureau's work, partial control was achieved over two compounds (calcium carbonate and barium sulfate) in oilfield waters that are inhibiting waterflood efficiency by plugging injection wells and corroding equipment. Laboratory research meanwhile pointed to a means of controlling a third compound (iron sulfide) which is the most damaging of all. Plans are being made for early field tests of the new technique.

Various hydraulic fracturing techniques consisting of high viscosity fluid, oil in water dispersion, oil and water emulsion, large water volume, and the standard water fracturing methods have added approximately 8 billion barrels of oil to this Nation's reserves during the 25-year period from 1946 to 1970. Reservoir information from over 100 wells in a low-permeability area were used

to determine the effectiveness of different fracturing techniques. Two independent methods were used in the analysis. The results indicated that an oil-and-water-emulsion fracturing technique produced from 34 to over 100 percent more oil than any of the other techniques with the standard water fracturing method being second best. The Bureau's evaluations indicate the complexity of choosing an induced hydraulic fracture treatment that will be most effective for the recovery of oil from low-permeability reservoirs.

A solvent extraction and distillation procedure was developed that effectively removed contaminants from waste lubricating oils without adversely affecting the hydrocarbon composition of the oil. This oil, after reformulation with an additive package, has good oxidation stability, passes wear and corrosion tests, and meets viscosity requirements for multigrade oils. Also, samples of waste oil were treated in the laboratory using methods similar to those used in commercial re-refining operations. The efficiency of each treating method in restoring the oil to its original quality was determined by a series of laboratory tests on the reclaimed oil.

2. Metallurgy: Fiscal year 1974, $16,272,000; fiscal year 1975, $19,898,000; increase, $3,626,000. The increase consists of:

	Increase (+) or Decrease (-)		Total	Total	
	Amount	Positions	Program	Positions	Explanation
(1)	$+1,900,000	+13	$2,000,000	14	To permit use of high sulfur coal as a replacement for oil and gas in powerplants.
(2)	+500,000	+2	500,000	2	To determine energy use patterns in metallurgical processing.
(3)	+900,000	+10	1,100,000	14	To expand capability to extract uranium from low-grade domestic ores to meet projected demand for nuclear fuel used for electricity.
(4)	+186,000	- -	- -	- -	Annualization of increased pay costs granted in fiscal year 1974 (E.O. 11789, October 1973).
(5)	+140,000	- -	- -	- -	Reimbursement for space provided by GSA in accordance with P.L. 92-313.
	+3,626,000	+25			

Cost Factors Involved in Increases

(1) The increase will provide for 13 permanent positions at an average annual rate of $15,600, $169,000 for 10 months; personnel benefits, $15,000; travel, $26,000; rent, communications, supplies and equipment, $10,000; and contractual services, $1,680,000.

(2) The increase will provide for 2 permanent positions, $35,000; personnel benefits, $3,000; travel, $4,000; rent, communications, supplies, and equipment, $3,000; and contractual services, $455,000.

(3) The increase will provide for 10 permanent positions at an average annual rate of $15,600, $130,000 for 10 months; personnel benefits, $11,000; travel, $20,000; rent, communications, supplies, and equipment, $8,000; and contractual services, $731,000.

NEED FOR INCREASES

(1) Use of high sulfur coal in powerplants; $1,900,000: Efficient and low-cost technology for removing sulfur oxides from powerplant stack gases must be made available if domestic high-sulfur coals are to contribute to the United States energy supply without environmental degradation. Burning coal for the generation of electricity, combined with stack gas cleaning, offers the most assured solution, in the short term, to the problem of satisfying consumer demand for power under existing environmental constraints. Lacking an economical supply of low-sulfur coal, the only recourse for many of our powerplants, particularly in the Eastern United States, is to burn low-sulfur oil or gas, much of which must be imported. With a viable stack gas cleaning process, these plants could burn coal, even though it is high in sulfur.

The increase will be used to transfer a promising process for cleaning base-metal smelter off gases to cleaning powerplant stack gases. Scores of processes for cleaning sulfur oxides from stack gases have been proposed over the years, but none of these have yet proved satisfactory for wide-scale application. In addition, the most advanced of the processes that are applicable to powerplant stack gases produce residues or sludges that pose difficult and costly disposal problems. The Bureau of Mines has developed a novel system called the citrate process for removing sulfur oxides from smelter gases. The process produces an end product of elemental sulfur which can be marketed or readily stored with a minimum of environmental disturbance. Ongoing laboratory and pilot plant work has shown that over 98 percent of the sulfur oxides can be removed from base metal smelter gases and that the same high efficiency can be achieved on flue gases from plants burning coal.

To advance the eventual transfer of this technolocy to utilities, the Bureau's process must be demonstrated on a large scale to prove engineering reliability and to refine cost estimates. The increase is needed to design and initiate construction of a demonstration plant which will be capable of treating 20,000 cubic feet per minute of stack gas from a powerplant burning coal containing 3 percent or more sulfur. Successful completion of the demonstration project will make available detailed engineering design, operation, and cost data essential for building full-size commercial units that can process 200,000 cubic feet per minute or more of gas. Laboratory and pilot plant research will be continued in order to refine the process flowsheet and minimize operating costs of the demonstration plant.

The increase also will permit acceleration of ongoing research aimed at developing other systems that show promise for preventing air pollution caused by burning fossil fuels in the generation of electricity. Included in the laboratory research are projects dealing with improved solid and liquid absorbents for sulfur and nitrogen oxides, better chemical methods for removing sulfur from coal, and the development of knowledge concerning the fate of toxic elements in combustion systems.

(2) Determination of energy use patterns in metallurgical processing; $500,000: A study on Energy Use Patterns in Metallurgical Processing began in the second half of FY 1974 with supplemental appropriation funds. Its objective is to identify the energy intensive areas in minerals and metallurgical processing

where research is likely to result in reduced energy use. This unique project will provide for the first time carefully documented, detailed, and specific information about amounts and types of energy used at every step, from mining the ore to making the finished product, for all of the important metals industries. The information developed in the studies will be used to select research areas in which the greatest opportunities exist for reducing energy consumption, for substituting abundant, low-value fuels and reductants for scarce, premium ones, for recovering waste heat, and for other process improvements.

The planned work will be accomplished under contract with an organization such as Stanford Research Institute, IIT Research Institute, Battelle Memorial Institute, and/or a trade association such as the American Iron and Steel Institute. The FY 1974 funds are being used to develop the plan of attack on the problem and to begin on two or three metals deemed most important in the U.S. economy, for which significant energy savings seem most likely. The additional funds for FY 1975 are to ensure the extension of the program to all the important metals and minerals industries.

(3) Expansion of capability to extract uranium from low-grade domestic ores; $900,000: Improved processing methods must be developed to extract uranium from low-grade materials, such as shales, lignite, coal ash, and phosphate from fertilizer production, to assure an adequate supply of uranium fuel to meet the projected demands for nuclear energy. Current projections indicate that the requirements for uranium will grow significantly during the next decade. AEC estimates indicate that the annual production rate from $8-per-pound U_3O_8 resources could be increased to about the level of the demands projected for 1979. However, beyond then, new low-cost resources and improved metallurgical processing will be required. Production costs for U_3O_8 are of considerable importance in the nuclear power program. For example, by 1990 each $1 increase in the price of U_3O_8 would cost utilities an additional $230 million per year. Present processing methods are suitable for recovering uranium from domestic reserves of high-grade ore, but these reserves will satisfy requirements only until the mid-1980's. After that, the uranium will have to come from domestic low-grade deposits or from foreign sources. Dependence on foreign sources is undesirable. Competition for uranium by foreign users will be intensive so the cost may be unreasonably high, and the availability may be restricted for political reasons.

The general approach for the increased program will consist of exploiting the advantages of modern hydrometallurgical methods in the processing of low-grade uranium ores. One of the techniques considered will be in situ processing to avoid excessive mining and milling costs for ore that contains minute quantities of the desired constituent. Because sufficient lead time is needed to develop improved processing technology to utilize low-grade ores, metallurgical investigations and research activities must be increased to supply needed uranium for nuclear fuel beyond the mid-1980's.

PROGRAM STATEMENT

Three interrelated factors exercise an increasingly dominant influence on the minerals and metals posture of the United States. First, the supply situation is deteriorating steadily as demand increases, domestic high-grade ores are being used up, and other nations compete with us for world supplies. Second, as environmental awareness becomes more acute, our aroused citizenry is demanding that the minerals and metals industries conform their operations to rigorous new standards. Finally, the changing energy situation that confronts the U.S. is forcing an appraisal of energy-use patterns on operations previously guided solely by economic principles, not by national priorities.

Although the exact forces that will shape our future mineral production and consumption patterns are nebulous, we can be reasonably sure that demand for minerals

in the U.S. will continue to outrun domestic supply. The Nation has been a net importer of minerals since World War II. By the year 2000, we may be forced to get more than half of our nonfuel mineral requirements from foreign sources. Based on the trends of the past 20 years, the nonfuel mineral output for the U.S. will be about $26 billion at the end of the century. Demand, on the other hand, will be $78 billion. The difference is the measure of our prospective problem. Furthermore, we will be competing for those foreign mineral products with other mineral-hungry nations all over the world. This situation could lead to a global minerals crisis that would make our current energy problem seem simple by comparison.

Recognition of the scope and scale of the problem is being registered by an increasing number of authorities, both within and outside the Federal Government. Major reports on the subject include:

- Mining and Minerals Policy--1973. Second Annual Report of the Secretary of the Interior.

- Material Needs and the Environment Today and Tomorrow. Final Report of the National Commission on Materials Policy, June 1973.

- United States Mineral Resources. U.S. Geological Survey Professional Paper 820, May 1973.

A shortcoming of our national minerals policy in the past has been that, as a nation of short-term progmatists accustomed to dealing with the future only when it becomes the present, we find it hard to regard future trends as serious realities. We have not achieved the capacity to treat as real and urgent--as demanding action today--problems which appear in critical dimension only at some future date. Yet failure to achieve this new habit of mind is likely to prove disastrous.

If the Nation is to avert the minerals crisis that is building, we must strengthen our efforts and use our available lead time. Part of the solution will come with the real innovations in processing low-grade resources, materials substitution, and secondary resource recovery that will help assure an adequate supply of mineral resources for generations to come. These innovations, however, must reflect other national issues in related areas, such as the environment and energy conservation.

Contrary to the emotionalism surrounding the second factor constraining the U.S. minerals posture, a strong mineral industry and a clean environment are not mutually exclusive. Part of the Metallurgy program is addressed to that relationship. An indication of the success that can be expected in the environmental area is the help given to maintain a substantial part of U.S. gold production. The Nation's last underground gold mine has been saved from the threat of closure by the Bureau's development of an environmentally-compatible gold extraction process that avoids the use of mercury.

In the current energy situation, which is the third minerals posture factor, competition for energy among industrialized nations and the consuming sectors of each nation is increasing significantly. In the U.S., the primary metal industries use 8.75 percent of U.S. energy. Another 3.9 percent goes into processing nonmetals such as cement and glass. With demand increasing for all forms of energy, the metallurgical processing industry will have to improve the efficiency of operations or switch to energy forms and fuels that are not as desirable for the residential, commercial, and transportation sectors.

The general purpose of the Metallurgy program is to help improve the Nation's minerals and metals posture. Research and development are directed to provide

the scientific and technical information necessary to encourage and stimulate the nonfuel minerals industry to make the expeditious advances in technology that will result in adequate and continuing supply of mineral raw materials at acceptable material and energy costs and with a minimum of waste and environmental degradation.

The program is directed to meeting the following needs:

- Economic methods to recover minerals and metals from ore bodies of progressively lower grade.

- New nonstandard innovative methods of recovering metals and minerals that maximize efficiency and minimize pollution.

- Wider use of mineral materials that are abundant, and origination of substitutes for scarce minerals.

- Improved technology for increasing the proportion of our Nation's minerals supply obtained through recovery and utilization of the valuable constituents in currently discarded scrap.

- Improved materials and metals that avoid useless deterioration or that are suitable for use with high temperatures, corrosive environments, or other adverse conditions encountered in chemical and metallurgical applications.

- New or improved methods for preventing pollutants in the off-gas streams, liquid effluents, and waste products of mineral processing plants.

- Metallurgical processes that use less energy or use low-cost sources of energy.

The Metallurgy program has four objective-oriented components. Under Advancing Minerals Technology, research is conducted that will result in major improvements in metals and minerals processing technology. Effecting Pollution Abatement is aimed at developing methods for eliminating air, water, and land pollution resulting from the processing of minerals. The objective of Secondary Resource Recovery is developing methods for recovering metals and minerals from mineral and industrial wastes, for upgrading and refining these metals and minerals, and for developing uses for them. Minimizing Mineral and Metal Needs covers research that will yield high-quality and improved-performance materials possessing increased service lives, which will result in more efficient use of our mineral resources.

PROGRAM OF WORK

Advancing Minerals Technology: $9,286,000 (Increase, $1,400,000)

Over 80 different nonfuel mineral commodities, differing in their modes of occurrence and in the treatment processes required, are essential to the industrialized economy of the U.S. However, our mineral reserves in high-grade deposits are being consumed at an alarming rate to meet the demand for mineral raw materials. Therefore, our future industrial health will depend to a large extent on efficient utilization of marginal and submarginal resources. The problems presented by lower-grade ores require recognition that transformation of mineral resources into mineral wealth has grown increasingly dependent on improved technology. On the other hand, many of the process units in today's metal-extraction plants are obsolete, with consequent inefficiencies in raw material and energy consumption as well as contributions to pollution. At the same time, the U.S. lags behind other industrial nations in developing and utilizing new and improved processes for metallurgical extractions.

This portion of the Metallurgy program has as its objective major improvements in metals and minerals processing technology. As this technology emerges and is transferred to the nonfuel minerals industry, the Nation will have: (1) lower-cost methods to treat domestic ore bodies of progressively lower grade; (2) more efficient metallurgical processes in terms of both raw materials and energy consumed; and (3) techniques that reduce environmental intrusion to an acceptable minimum. The proposed research will help form the base for developing the metallurgical capability to deal with the impending crisis in our mineral supply picture.

The challenge of developing an economic method to recover alumina from domestic resources is a typical example of an opportunity to solve an increasingly adverse mineral supply problem. The U.S. produces about 34 percent of the world's aluminum, yet must import 90 percent of the raw materials needed. On the other hand, the Nation has abundant resources of aluminum-bearing minerals such as clay, anorthosite, shale, alunite, and dawsonite. A number of processes have been proposed for recovering alumina from these materials, but none has yet proved economically competitive with Bayer process alumina from imported bauxite. While world supplies of bauxite are adequate, the U.S. is encountering steadily increasing competition in the acquisition of nondomestic bauxite as other industrialized countries also seek reliable sources of these raw materials at a reasonable price. Unstable political climates as well as nationalization of bauxite mining operations in some of the bauxite-producing countries add to the uncertainty of U.S. supplies and pose a threat that the cost of bauxite to the Nation could be increased substantially at any time.

Recent Bureau of Mines research has indicated that, with some modifications and the application of new or improved technology, our domestic resources might become competitive with imported bauxite. In the long-term national interest of developing an economically viable process for utilizing domestic aluminum resources, the technology to recover alumina from clay and other domestic raw materials should be brought up to date. Figure 1 compares the major steps for processing bauxite or clay to recover alumina.

The purpose of the effort in FY 1975 will be to continue this research to test and develop the most promising technologies on a small, continuous pilot-plant scale. New improvements and approaches developed by industry and the Government for recovering alumina from clay, anorthosite, alunite, and shale will be tested and evaluated in the plant to compare them on a single basis, and to obtain enough information on which to form a sound judgment regarding the best processes. In order to accelerate the program, the Bureau of Mines has invited the U.S. aluminum producing industry and interested firms to join a cost-sharing cooperative effort.

During the coming years, the U.S. faces increasingly large deficits in domestic production of its iron ore needs. When the rich direct-shipping hematite ores of the Lake Superior district became exhausted, the Bureau took a leading role in developing methods for upgrading magnetic taconites to replace them. There is, however, a much larger resource of nonmagnetic taconites also capable of yielding high-grade concentrates if suitable beneficiation methods can be developed. In one phase of the program, parallel pilot-plant studies will be made of flotation and of roasting/magnetic separation techniques in order to determine the best process for the nonmagnetic taconites of the Mesabi Range on the basis of metallurgical effectiveness and cost. An integral part of the work will be studies on conservation and reuse of process water.

The U.S. must import almost 90 percent of the nickel it consumes. The Bureau has been working in the laboratory on a process for recovering nickel from low-grade ores found in abundance in the Oregon/California area. Recent drill and channel sampling of these deposits suggests at least 200 million tons of ore containing more than 0.7 percent nickel, several times larger than previous

estimates. Emphasis will now be placed on large-scale testing of the process.

Another phase of the program related to increasing the efficiency with which energy is used in metallurgical operations concerns the induration of taconite pellets. This operation uses about 60 billion cubic feet of natural gas annually, which is roughly 0.3 percent of U.S. consumption. Pilot-plant operations will determine the practicability of using lignite of subbituminous coal instead. This effort is the first part of research and development aimed at reducing the consumption of premium fuels and electric power in metallurgical operations.

Reduction in energy use is also one objective of an expanded effort on in situ leaching. Mining, crushing, grinding, beneficiation, and pyrometallurgical operations can be supplanted by this technique for recovering nonferrous metals. In situ leaching should also become an effective means of unlocking small, low-grade, unmineable deposits in order to augment supplies of metals such as copper, gold, and silver. There will be an interchange of hydrometallurgical data between this effort and a similar one on heap leaching designed to produce low-cost means to treat submarginal ores and bypassed materials that are not economically amenable to processing by conventional beneficiation techniques.

Another area of specific interest in nonferrous metals centers on lead and zinc. The recovery of these metals from their sulfide ore concentrates by conventional smelting techniques is the target of intense environmental regulation. The consequent closing of outmoded facilities is a major factor in the current zinc shortage. Alternative methods to recover these metals will be developed on the basis of current promising laboratory investigations that center on processes using aqueous chlorination-fused-salt electrolysis, or vapor-phase reduction techniques. The new processes will also be applicable for small deposits--custom smelting is on the decrease, which stops development of small deposits.

As an alternative to the traditional smelting of copper and its consequent formation of sulfur dioxide gases, ferric chloride leaching to dissolve copper from sulfide minerals is being developed. A generalized flowsheet for the new process is shown in figure 2. A major advantage of this hydrometallurgical method is the formation of elemental sulfur. Emphasis is now directed toward optimizing variables in the steps for recovering copper metal and regenerating the ferric chloride leaching solution.

The disposition of the slime formed during the beneficiation of Florida phosphate ore is a major environmental problem. This slime has colloidal properties that prevent practical dewatering. As a consequence, it must be stored in giant ponds behind retention dams, of which there are over 300 miles in active use. Of equal importance, phosphate equivalent to about 15 percent of world output passes through the beneficiation plants and is wasted in the slime. To solve both the environmental and conservation problems, an alternative method is being developed to process Florida phosphate ore directly to phosphoric acid for fertilizer production without the intervening beneficiation step that produces the objectionable slime. Previously considered uneconomic, preliminary results show that the expense of beneficiating the ore is avoided, that over 90 percent of the phosphate is recovered (contrasted to less than 70 percent by present processing methods), and that the slime disposal problem is bypassed entirely. Planned development will center on on-site testing and demonstration for a variety of ores in Florida.

A first step in the conversion by technology of low-grade resources to viable ore reserves is the application of ore testing. A significant increase in this activity is warranted as more and more attention is directed to domestic resources. Ore testing is a necessary step in the sequence of activities that starts with exploration and ends with developed reserves; it indicates the optimum beneficiation technique for each new deposit.

The increased program will consist of exploiting the advantages of modern hydrometallurgical methods in the processing of low-grade uranium ores. One of the techniques considered will be in situ processing to avoid excessive mining and milling costs for ore that contains minute quantities of the desired constituent. Because sufficient lead time is needed to develop improved processing technology to utilize low-grade ores, metallurgical investigations and research activities must be increased for nuclear fuel beyond the mid 1980's.

The increase will provide for a study on energy use patterns in metallurgical processing that began in the second half of fiscal year 1974 with supplemental appropriation funds. Its objective is to identify the energy intensive areas in minerals and metallurgical processing where research is likely to result in reduced energy use.

Effecting Pollution Abatement: $6,470,000 (increase $1,900,000)

In an environmentally conscious age, the orderly and efficient abatement of pollution resulting from our minerals processing industry presents the technologist with an array of seemingly unlimited challenges. He must clean up stack gases and water discharge streams, provide safe, nonpolluting disposal systems for waste products, and reclaim large acreages of land despoiled by past mining and milling activities. New and improved pollution abatement technology is acceptable only if implementation of the technology does not impose cost and operating constraints that would excessively limit continuation or expansion of the Nation's productivity of essential raw materials. Consistent with the Bureau of Mines mission to assure the Nation of an adequate supply of minerals and metals, the goal of this segment of the Metallurgy program is to develop pollution control and abatement technology in the minerals processing area at an acceptable cost. Research is directed toward development of low-cost methods of removing pollutants from waste gases and waters discharged at metallurgical and mineral processing plants, and to promote the safe storage or disposal of valueless materials.

The development of waste gas cleaning technology is assigned high priority. During FY 1975, development work on the Bureau's citrate process for removing sulfur dioxide from smelter stack gases will be continued. Operation of the Bureau's pilot plant at the Bunker Hill Company lead smelter near Kellogg, Idaho, will provide key design, operation and cost data for commercial-size plants. Figure 3 shows the generalized flowsheet for the citrate process.

Laboratory research to improve the citrate process will be expanded with studies initiated to develop sulfur dioxide control technology which can be considered third generation. Improvements will be sought through more efficient and lower-cost scrubbing solutions, high throughput reactors, and steamlining of flow sheets. Because both the citrate process and the proposed third generation sulfur dioxide control processes are capable of treating dilute gas streams and producing elemental sulfur which can be safely stored as the end product, both laboratory and pilot plant work will be conducted so that the processes can be adjusted to treat flue gases at powerplants burning high-sulfur fuels. Providing an efficient and low-cost sulfur dioxide gas-cleaning process would allow utilities, particularly in the East, to meet energy demands with our vast domestic coal resource regardless of sulfur content. During FY 1975, increased funds will be used to design and initiate construction of a citrate process demonstration plant for a powerplant burning coal containing 3 percent or more sulfur.

The development of low-cost techniques for decontaminating mineral processing waters not only to alleviate pollution, but to encourage water recycling as a conservation measure is another major objective of the program. This research, which was initiated in FY 1973, will be continued. In some instances it is anticipated that decontaminating waste waters will not only be an antipollution measure, but that the recovery of metals and minerals from these wastes will appreciably aid domestic supply.

Seldom can the value be extracted from an ore deposit without generating huge tonnages of mining and processing waste materials. For this reason the minerals industry is the second largest single source of solid wastes. Wind and water erosion of these waste piles when left unattended can result in serious air and water pollution problems. The Bureau has been highly successful in developing and demonstrating effective stabilization technology for many of these waste piles at a number of past and current operations. Surface incrustations formed by chemical methods have been shown effective for such wastes as radioactive uranium mill tailings. Stabilization through establishing plant growth has been achieved on several waste piles frequently only after conducting considerable laboratory research to find soil additives and chemical treatments which could transform the surface layer from an inert substance to a nourishing blanket to support seed germination and growth. Generally, each waste pile has its unique characteristics and must be treated on an individual basis. Both laboratory and field stabilization research will be continued during FY 1975, with the emphasis on waste piles that are particularly troublesome. Providing technical assistance to industry to help solve special stabilization problems will remain an important part of the work.

Slime disposal is a perplexing and major environmental problem in the production of phosphate for fertilizer raw materials. Complementing the research on direct processing of phosphate ores to phosphoric acid, the Bureau will continue its cost-sharing cooperative research program with the Florida phosphate industry to develop slime dewatering technology.

Success in this undertaking would not only eliminate the threat of dam breaks and recover water for recycle, but would also permit reclamation of the valuable land currently used as holding ponds. Related research will be continued to dewater slimes known as the red muds which are the waste product from the production of aluminum. The research will also deal with the tailings produced during the processing of iron ore so that the lack of safe disposal methods will not restrict exploitation of major domestic iron deposits.

The desulfurization of fuels and stack gases is expected to make available an abundant and low-cost supply of sulfur. Part of the pollution abatement research is devoted to developing new large tonnage markets for this sulfur, much of which will be produced at locations too remote from existing markets for economic shipment. Studies are underway on the use of sulfur to improve asphalt-aggregate pavement mixtures, for applying sulfur formulations to seal mineral waste holding ponds from seepage and to stabilize dried-out mineral tailings piles to prevent air and water pollution, and to define uses for low-cost sulfur which will improve the performance of construction materials when exposed to detrimental environments.

Secondary Resource Recovery: $1,843,000

Recovery and reuse of the vast quantities of available secondary resources is an important measure to augment our supply of mineral raw materials. Another equally important potential benefit to be derived from recycling is the dramatic energy savings associated with reuse of metals. The energy used to produce primary metals such as aluminum, steel, and copper from ore is not lost when the metal is fabricated into a product. Since nearly all metals can be recycled with a relatively small amount of energy input, they represent a resource bank in which energy has been invested. Current manufacturing practice, with its attendant generation of throwaway wastes, not only needlessly accounts for consumption of primary materials and energy, but also results in usurpation of potentially valuable land for fill and, in addition, poses a constant threat to the environment.

One of the more serious of these problems that the Bureau of Mines has addressed itself to over the past several years is the disposal of urban refuse and trash. Earlier work has culminated in the development of a highly successful process for recovery of the metal and mineral content of municipal incinerator residues. This process has been selected for large-scale demonstration by the Environmental Protection Agency under a grant to the City of Lowell, Massachusetts. The Bureau will continue to supply technical support to the project through the demonstration stage which is scheduled for completion in 1975. Work on a parallel process for recovery of the metal, glass, and energy values contained in raw, unburned refuse has progressed rapidly and it is expected that the process will be ready for large-scale demonstration by the end of FY 1975.

The Bureau has had a substantial research effort over the past five years on the separation, recovery, and upgrading of the ferrous and nonferrous metal values contained in junk cars and related ferrous scrap such as large appliances. Work on development of a large prototype smokeless junk car-railroad car incinerator was highly successful and has been adopted by the scrap industry. These studies will be terminated early in FY 1974. Because of the constantly changing nature of new cars and the variety of metals and nonmetals consumed by the automotive industry, laboratory work on separation and recovery methods will continue. Emphasis will be placed on the reclamation of the valuable plastic materials in scrap cars which are increasing at an alarming rate. Currently these materials, some of which are worth 60 cents a pound, are landfilled for lack of suitable separation and recovery techniques. Studies will be continued on the problems associated with recovery of metal values from obsolete airplanes with emphasis on problems associated with recycling of alloys containing high percentages of magnesium. Prior research has shown that many of the waste products generated during the production of and fabrication of metals and alloys into manufactured items can be treated to recover valuable constituents such as chromium, nickel, molybdenum, tungsten, gold, and silver. Research will be continued to develop new methods and improve existing ones for treating major sources of such materials including waste process solutions, sludges, drosses, slags, and dusts to obtain products for refining or immediate reuse. Techniques to be applied in this work include roasting, smelting, vaporization, and blending of wastes to produce a product for reuse.

Minimizing Mineral and Metal Needs: $2,299,000

As the need to conserve our mineral supplies becomes more apparent, there will be a swing of the pendulum away from the principles of today's consumer-oriented society in which little thought is given to frugality with materials. This is not to say that we may expect or need a return to the old New England watchwords: "Use it up. Wear it out. Make do. Do Without." To avoid such implied dislocation of material supplies, this part of the Metallurgy program covers developing high-quality and improved-performance materials that, because of longer life, will result in more efficient use of our mineral resources.

Materials research affords one of the major opportunities to conserve natural resources while still satisfying the ever-increasing demand for metals and minerals. The development of higher performance materials, both metallic and nonmetallic, is essential if significant technological advances are to be made toward solutions to many of the Nation's most critical problems. Light, strong, and corrosion-resistant materials are needed to implement new engineering concepts in transportation, energy conversion, and buildings. Improved alloys and ceramics will eliminate many of the current limitations in processing and manufacturing. Technology for reducing environmental pollution including the hazard

and nuisance of noise will be realized at lower cost if new materials are developed specifically for pollution-control equipment. The planned work will provide much of the needed technological information for improving materials utilization.

Over the years the Bureau has built and fostered a striking expertise in metallic minerals, especially those based on new and exotic metals. The zirconium in the reactor of the first nuclear-powered submarine, the U.S.S. Nautilus, came from our laboratories. Development of titanium from a laboratory curiosity into a major aerospace metal was due to Bureau work. This expertise is currently being applied to areas such as: impurity limits for recycled steel; wrought ductile iron to replace steel in some applications; improving the drawing properties of electrowon copper; determining the mechanisms of corrosion of iron and iron-chromium alloys; and developing special iron alloys and molybdenum alloys and composites for high-temperature use. Molybdenum, of course, is one of the few metals for which the domestic supply outlook is satisfactory.

In FY 1975, research will be conducted to develop improved, low-cost materials of construction that can resist the corrosive and erosive conditions encountered when handling concentrated geothermal brines and steam. Based on the knowledge of the properties of these fluids, a complementary part of the expanded research will be directed toward developing economic methods to separate and recovery by-product minerals from among those dissolved in geothermal brines in order to augment mineral supplies and help defray geothermal-system development costs.

Other research will include work aimed at: lowering the cost of fabricating sound-damping alloys; improving the mechanical properties of low-cost metals in relatively large supply, such as magnesium and lead, that are now virtually by-passed as materials of construction; improving the mechanical performance of common steels; and developing new alloys of reactive and refractory metals for uses other than aerospace applications, such as the chemical and metallurgical process industries.

In addition to developing new materials, there is a distinct need to develop substitutes that utilize minerals in plentiful supply. A major opportunity exists for the use of nonmetallics in such applications. Current Bureau research is concerned with studying the development of improved drilling muds, cements serviceable in high-temperature hostile environments, high-temperature, erosion-resistant ceramics, and refractories stable for use with molten metals and high corrosive slags and glasses, and improved materials for casting.

In the proposed program phase on nonmetallics, the Bureau will continue and expand its testing and evaluation program for clays and other ceramic raw materials, which is conducted in cooperation with the Nation's State Geologists. This work reflects the continual need of local industries for nearby sources of raw materials because shipping costs limit clay and other ceramic-based building materials to nearby consumers. Also to be continued and expanded is the work on the Bureau-developed attrition grinding process for preparing submicron powders, which show remarkable promise to give excellent sintering properties for ceramic bodies of improved quality.

Studies on a nonpolluting method of treating copper ores resulted in the discovery of a novel technique for growing iron or copper whiskers. Investigations of this technique will be extended to nonmetallic fibers. In another unique field, the catalytic activity of rare-earth compounds (misnamed because they are in relatively abundant supply) for fuel cell reactions and the capability of rare-earth/transition-metal alloys for storing hydrogen will be studied.

To improve the usability of nonmetallics, techniques will be developed for modifying the surface of glass and ceramics so that the inherent high strength can be realized. Also, research to improve the strength of cemented carbides, essential to our tool industry, will be initiated.

EXAMPLES OF RECENT ACCOMPLISHMENTS

The Bureau of Mines citrate process pilot plant for desulfurizing lead smelter gas started operations and in initial runs showed that over 99 percent of the sulfur could be removed readily from gas containing about 0.5 percent sulfur dioxide. The pilot plant, designed to treat 1,000 cubic feet of gas per minute, will provide engineering data for commercial smelters to help meet air quality standards. In a related effort, the Bureau's process has been applied in another pilot-scale plant at Terre Haute, Indiana, for treating the flue gas from a coal-fired, steam-generating station. Initial results are encouraging: 95 percent of the sulfur is being removed and recovered in the elemental form from gas containing less than 0.3 percent sulfur dioxide.

In mid-1974, the U.S. capacity to produce iron ore will be increased 5 percent when the Tilden, Michigan, plant of Cleveland Cliffs Iron Co. goes on stream. Based on the results of Bureau of Mines research, this project to produce 4 million annual tons of high-grade iron oxide pellets is the first large-scale commercial venture in processing nonmagnetic taconite. The plant, located at Tilden, Michigan, represents an industrial investment approaching $200 million.

Ceramic research has shown that when small additions of waste glass are made to the slag used to make common brick, the required maturing temperature can be lowered significantly. This in turn permits an increase in the output of each kiln and reduces fuel consumption. For instance, substitution of 10 percent glass for clay would save 22 billion cubic feet of natural gas annually or 0.1 percent of total U.S. consumption while increasing production capacity by 11 percent. Up to 15 million tons of waste glass from municipal refuse could be available annually for this use. Techniques to reclaim the glass have already been developed by the Bureau of Mines.

The pilot plant for separating urban raw refuse into its various components, which was completed last year, was operated on a variety of bulk samples representative of domestic and commercial refuse. Operating data showed that a net profit of $5 per ton could be obtained by separating the refuse into its metal, mineral, and combustible constituents. In addition to demonstrating that raw refuse separation is potentially profitable, processing the refuse would result in an additional savings of about $3 per ton by eliminating some of the costs of haulage and landfilling now associated with disposal of the refuse. This project has received international attention. Based on the Bureau's work, a similar pilot plant is being constructed in Spain with assistance of Bureau engineers.

An innovative, air pollution-free electric smelting scheme for producing blister copper was successfully demonstrated when 50 tons of copper concentrate was processed to the metal. This process circumvents the air pollution problems of sulfur dioxide encountered in conventional smelting. Based on the results of this work, a major copper smelting company is discussing a cost-sharing cooperative agreement with the Bureau of Mines to investigate the process on a larger scale.

Bureau research has shown that road surfaces made of a sulfur/sand/asphalt mixture is comparable in quality to conventional aggregate/asphalt paving mixtures. Thus, in those parts of the country where aggregate is expensive because it must be shipped in, local sand and sulfur can be used instead. In addition, the possibility of substituting sulfur for part of the asphalt becomes increasingly important in view of the current energy crisis. The source for asphalt is the bottoms fraction from crude oil refining, but more of this material is being converted to heavy oils for fuel use.

Technology developed by the Bureau of Mines had a significant impact on U.S. gold production in recent years. Leaching techniques applied to deposits at

Carlin and Cortez, Nevada, have already increased production by more than 50,000 ounces of gold per year. Use of the carbon-in-pulp recovery process increased gold recovery from slimes by 8,000 ounces a year at the Homestake Mining Co. in South Dakota. Now, the Bureau's simple heap leaching technique for treating low-grade ore, mine waste, tailings piles, and abandoned workings is being increasingly adopted by the gold mining industry. The successful technique is presently being exploited by the Bootstrap and Cortez gold mines in Nevada to recover gold from mine wastes previously discarded. The recent escalation in the price of gold is leading industry to consider the possibility of broadening the application of the technique to in-place leaching, under closely controlled conditions, for recovering gold from less accessible, more deeply buried, deposits.

As a result of the cooperative clay testing program with State Geologists, a deposit of soft shale, suitable for manufacturing high-quality lightweight aggregate has been located in Clay County in western Georgia, and a company has been formed to utilize it. Although poorer quality aggregate raw material is available in the vicinity of Atlanta, this is the first source of high-quality aggregate found in Georgia. The clay testing program has also been responsible for the first satisfactory Florida source of clay for bricks. This clay, which is obtained from a sand washing operation at Claremont, Florida, produces a high-quality, white brick or tile.

Methods have been developed and demonstrated on a laboratory scale for rolling ductile iron into sheets and forging it into various finished shapes. Thus, ductile iron, which is made from scrap iron in many cases, can be substituted for wrought steel in some applications previously not possible. This substitution is advantageous because ductile iron manufacture is less costly, requires less capital, encourages recycling of scrap, and consumes less energy than steelmaking.

Small permanent magnets made from samarium-cobalt alloys are commercially available for applications in small electric motors and wrist watches, but they are limited to high-cost products. To make less expensive magnets that are almost as good, the Bureau has shown that mischmetal can replace pure samarium in the magnet alloy. Mischmetal is cheaper because it is made from the mixture of rare earths as found in nature without undergoing costly refining. Magnets of this family of materials have longer magnetic life and are much stronger than normal iron or sophisticated Alnico magnets in use today. In the area of rare-earth metal utilization, another development is the industrial acceptance of the Bureau method of producing mischmetal from molten oxide concentrate. This straightforward method is comparable to conventional aluminum production and it has been adopted by the Rare Earth Metal Company of America because it is more efficient and less pollution prone than the present commercial process of making mischmetal from chlorides.

Pollution problems arising from the production of titanium dioxide pigments may eventually be solved by adopting technology developed in the laboratory. A sulfate process is used commercially to produce nearly 85 percent of the TiO_2 pigments from ilmenite, an iron-titanium ore. However, this process also produces a hydrous iron sulfate waste which presents a difficult disposal problem. The Bureau has developed a smelting technique that produces an iron metal byproduct and a borate slag from which pigment-grade TiO_2 can be recovered easily.

Rutile--all imported--is processed by chlorination to make the remaining 15 percent of the U.S. titanium dioxide pigments. To substitute ilmenite for rutile in the chlorination operation, a means must be developed to recover chlorine from the iron chloride that would be formed. The Bureau has developed an efficient method to decompose iron chloride into recyclable chlorine and iron oxide, a useful byproduct. Thus, an economic process for treating ilmenite by chlorination is available and the need to dispose of $FeCl_3$ as a waste is obviated.

3. Mining Research: Fiscal year 1974, $43,783,000; fiscal year 1975, $89,750,000; increase $45,967,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) + $ 300,000	+ 3	$ 4,624,000	83	For research on safety and health problems in metal and nonmetal mines.
(2) + 38,700,000	+ 119	46,500,000	147	For development and demonstration of improved coal mining technology.
(3) + 5,600,000	+ 20	5,600,000	20	To conduct studies and research to aid in future development of oil shale.
(4) + 1,170,000	--	--	--	Reimbursement for space provided by GSA in accordance with P.L. 92-313.
(5) + 197,000	--	--	--	Annualization of pay increase granted in FY 1974 (E.O. 11789).
+ $45,967,000	+ 142			

COST FACTORS INVOLVED IN INCREASE

(1) 3 permanent positions at an average salary $16,000 (10 months) $40,000; personnel benefits, $4,000; travel, $6,000; supplies, materials, and equipment, $50,000; and research contracts, $200,000.

(2) 119 permanent positions at an average rate of $17,500 (10 months) $1,735,000; personnel benefits, $145,000; travel, $185,000; supplies, materials, and equipment, $1,700,000; drilling contracts, $200,000; and contractual services including research contracts, $34,755,000.

(3) 20 permanent positions at an average rate of $16,000 (10 months) $270,000; personnel benefits, $23,000; travel, $30,000; supplies, materials, and equipment, $170,000; and research contracts, $5,107,000.

NEED FOR INCREASE

(1) Research on safety and health problems in metal and nonmetal mines, $300,000: $100,000 is for exploring concepts to protect miners within 25 or 30 feet of the face which is the most hazardous area in mining. Temporary supports are now utilized until a permanent support system is installed. However, most temporary supports offer only point support such as timber props. Also while installing temporary supports, the miner is exposed to unsupported ground.

$100,000 is for research on procedures and equipment for testing and evaluating wire rope hoisting systems. A reliable nondestructive testing device is needed

for detecting corroded and broken strands of wire beneath the surface and invisible to the naked eye while the rope is in place.

$100,000 is for expanded work for control of radiation hazards in uranium mines by higher ventilation pressures. Theoretical calculations have indicated control is possible. The practical underground application of this theory will be tested.

(2) Advancing Coal Mining Technology: $38,700,000 is for expansion of the comprehensive coal mining research and development program which the Bureau initiated in FY 74 to help to provide the improved mining systems required to assure the continued availability of this vital energy resource at competitive cost with the environmental and other safeguards demanded by society. If coal is to meet the Nation's energy needs, coal production must increase significantly. Present projections show that this increase may require a trebling of production between now and 1985. Present underground mining technology cannot deliver these tonnages and proposed environmental protection regulations for surface mining further complicate the supply picture.

In response to these needs and after consultation with users, producers, and other interested groups, a balanced research program was structured which promises solutions in both the surface and underground coal mining areas. Major program elements include:

-- Improvements in coal mine development systems to reduce the time-to-production requirements for underground mining;

-- Adoption of the longwall mining method to mining conditions in the U.S. and automation to improve productivity;

-- Automation of the continuous miner to increase the efficiency of the system which produces more than half of our underground coal;

-- Development of mining methods and equipment for the efficient mining of thick or pitching coal and lignite seams which constitute a substantial portion of recoverable fossil fuel reserves;

-- Development of technology to predict and control environmental aspects of underground mining such as subsidence, acid mine drainage, coalbed fires, and waste disposal;

-- Demonstration of the recovery of methane from virgin coal and gob areas to reduce this constraint on production and to contribute to the total energy resources;

-- Develop and demonstrate improved geophysical techniques to define mineable coal deposits;

-- Geochemical baseline studies to provide regional standards for reclamation;

-- Development of a system that will provide rapid and accurate determinations concerning the location, chemical character, thickness, tonnage, quality, and rank of coal resources and reserves;

-- Collection and analysis of resources and environmental data to produce information needed for policy decisions.

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-- Development of technology for the utilization of unrecoverable resources by in situ gasification;

-- Development and demonstration of surface mining systems which integrate the excavation and reclamation processes to reduce the environmental impacts associated with surface mining.

(3) Advancing Oil Shale Mining Technology: $5,600,000 is needed for the research effort on oil shale mining technology. The western oil shales represent this Nation's largest oil resource as well as a potential source of carbonate minerals for stack gas treatment and aluminium. The realization of these resources in the quantities projected depends in large measure on the development of technology to completely recover these deposits and dispose of the waste material from the oil shale retorting process in an environmentally acceptable manner. The proposed program will investigate both surface and underground mining methods as well as those parameters affecting the stability, erosion control, and revegetation of surface disposal of waste material.

PROGRAM STATEMENT

With the passage of the Federal Coal Mine Health and Safety Act, P.L. 91-173, on December 30, 1969, the Secretary of the Interior was further authorized to carry out a Coal Mining Health and Safety research program. In this Act, Congress declared with regard to the purpose and goals of this research that:

-- First priority in coal mining must be the health and safety of the miner.

-- Secretaries of the Interior and HEW shall conduct, in cooperation with the States and the coal mining industry, research that will prevent mine accidents and occupationally caused diseases.

-- An urgent need exists for better and more effective ways to prevent deaths and serious injuries.

Congress in writing Public Law 89-577, the Federal Metal and Nonmetallic Mine Safety Act, gave to the Secretary of the Interior authority to conduct research in mining technology in this area to seek out ways to prevent accidental injury and work related illness.

The United States mining industry is beset by economic, environmental, and institutional problems. Production is not keeping pace with demand. The problems are far too great for a single company to undertake and the industry collectively does not have sufficient people, funds, or organization to undertake extensive research required to provide the needed technology.

The mining research program is directed to help meet the mineral and fuel industry technology needs consistent with current and projected demand. The problems facing industry are a function of five primary interrelated factors:

-- health and safety constraints

-- mineral and fuel deposit parameters, depth, size, grade, etc.

-- environmental constraints

-- energy considerations

-- supply-demand relationships and trends

Each of these factors individually represents a complex condition. An integrated approach to the Nation's mining problems is required to provide solutions which are socially, economically, environmentally and institutionally acceptable.

Research and development program objectives have been established to meet short, mid-term, and long range needs. Maximum use is made of the unique and extensive skills and expertise in the Bureau's mining research centers. This in-house effort is supplemented by outside contracting to universities, nonprofit research organizations, industrial research centers, labor unions, trade associations and individual mining companies. Through this means, the technical expertise available outside Federal Government laboratories is also applied to national needs and problems. The thrust of the mining research effort is to both develop and transfer this new technology into mining practice. To assist in this effort, an active technology transfer program has been established. The goal is to cut the 10 to 20 year "technologic lag" between development and actual use of new equipment and practices. Technology transfer is promoted through technical publications, seminars, meetings, through promulgation of improved health and safety standards and through technical assistance to industry. Actual in-mine demonstrations of promising new developments and cooperative agreements with the mining industry are used to provide all concerned with details on the use and benefits of new technology as soon as it is available.

The components of the mining research programs are listed below:

Mining Health and Safety Research:

Health Related Research in Coal Mines

Safety Research in Coal Mines

Metal and Nonmetal Health and Safety Research

Advancing Mining Technology

Explosives

Advancing Coal Mining Technology

Advancing Metal and Nonmetal Mining Technology

Advancing Oil Shale Mining Technology

PROGRAM OF WORK

HEALTH AND SAFETY RESEARCH $32,300,000

Health Related Research in Coal Mines: $3,566,000

Greater emphasis will be placed on reducing the level of respirable dust - the cause of black lung disease - in mine environments. Today, approximately 15 percent of the bituminous coal miners in the United States are afflicted with pneumoconiosis (black lung) from respirable dust exposure before 1970. By 1981, it is estimated that payments for black lung benefits to disabled miners and their families will have cost the taxpayers more than $11 billion.

In FY 1975, respirable dust research will emphasize controlling dust formation at the face through water infusion and by changing the mining machine cutting action. Surfactants and foaming agents will continue to be investigated for suppressing dust once it is formed. Advanced dust collectors will also be studied as a means to collect all dust generated at the face.

The mandatory noise standards which were promulgated under the Coal Mine Health and Safety Act of 1969 specify the maximum noise levels permitted at various exposure times for miners in underground coal mines. Because most noise sources are intermittent, measuring the miners exposure is difficult. In FY 1975, we will continue development of improved monitoring instrumentation and seek ways to reduce noise in mining machinery.

Present analytical methods are inadequate for identifying and quantifying the various gaseous toxic and noxious products found normally underground and in event of a fire. Such materials include the decomposition products of fire extinguishants, thermal decomposition of a variety of combustibles such as belts, fumes from explosives, and gases produced by diesel engines. Data are needed on these materials to draft regulations on use of diesels in coal mines and to revise regulations regarding use of fire resistant materials. Studies will continue on evaluation of toxic products produced as a result of (a) underground fires, (b) the use of fire extinguishants applied to established mine fires, and (c) relatively low temperature decomposition under abnormal operating conditions. In-mine measurements of toxic gases produced by diesels will be accelerated. Modified engines will also be studied and tested as a solution to reduce the quantity of toxic materials emitted in the exhaust gases.

Safety Research in Coal Mines: $24,110,000

Miners are subjected to unique hazards not found in most other industries. A miner must contend with a roof that may fall if proper precautions are not taken. He has to work with massive, powerful equipment in a very limited space which is poorly lighted. Forced ventilation must be controlled otherwise an explosion can occur because of the methane gas emitted from the coal. All of these hazards must be considered in an integrated manner if ways are to be found to either minimize or eliminate the problems.

Safety research objectives are based on analysis of the causes underlying coal mine accidents and an assessment of how soon the payoff from a particular research investment can be expected. Accidents involving electricity, for example, might lend themselves to short-term research efforts while others, such as roof falls, involve more studies and require longer-range development of substantially new mining technologies.

Falls of rock, or coal from the roof, rib, or face continues to be the leading cause of fatalities and injuries in underground coal mining. These accidents occur at all places and for a variety of reasons. There are no simple solutions to the problem.

Roof control research will attack face area problems through support techniques that can be installed remotely. Temporary support systems that offer full protection will continue to be explored. Roof fall detections and warning systems will be advanced and field tested. The Bureau of Mines has developed a Horizontal Roof Strain Indicator now being used in a coal mine. Conventional, grouted, and pumpable roof bolts will be further tested and performance monitored.

Design criteria for roof support plans will be determined. Analytical and mine studies of openings will continue so that greater roof stability designs are found. U.S. application of longwall and shortwall mining methods will be advanced by identifying the safety of longwall design and support systems (such as single vs. multiple entries). Pillar recovery practices will be examined to find safer procedures. Safe design guidelines for coal waste embankments will be further defined.

Industrial hazards of coal mining are concerned with accidents related to electrical, mechanical, human factors, illumination, communications and materials handling problems. Human factors research will emphasize standardization of controls on underground equipment, the development of simulators for training operators on the various types of mining equipment, and evaluation of industry ongoing training programs. Methods for reducing electrical shock hazards from high voltage AC circuits will be examined. Sensors for automated and remote machine operations will be developed and tested as suitable devices become available. Hazards inherent in present machine designs will be identified and modifications suggested.

Implementation of proposed illumination regulations requires consideration of light level, surface brightness rather than total light delivered to the surface, glare, human adaptation when leaving or entering unlighted parts of the mine, permissibility, ruggedness, portability, and geometrical compatibility of the light source to mine areas. We propose to continue development of special hardware for problem mines, conduct mine evaluation of hardware developed, and establish and validate criteria for underground illumination.

Existing mine communication systems are hardwire, trolley line, and conventional telephone. These are limited to haulageways and to within 500 feet of the production face. In case of a fire or explosion they become inoperable. Since there is a critical need to extend communications to miners at the face and to develop a mine surveillance system to reduce the occurrence of or prevent disasters we need to further improve available systems. A total mine communications system designed and developed in FY 1974 will be tested in an operating mine. It provides voice communications between the surface and the face and will function during an emergency. We expect to complete drafting of standards for designing, operating, and testing mine communications systems. Mine surveillance systems will also be advanced in capability. These systems such as that installed in the Bureau's Safety Research Coal Mine will monitor methane, carbon monoxide, air flow, temperature, and oxygen, and warn surface and underground personnel of danger caused by abnormal conditions.

Coal transportation and handling of materials, supplies, and men cause the highest number of accidents and the second highest number of fatalities in underground coal mines. Improvements are needed in existing haulage and handling techniques to reduce these hazards. Research will be done on an automated trackless tractor-trailer haulage system and on an improved panel conveyor belt system. Safer man transit systems will be explored.

Fire and explosion research will address the areas of ignition, flame propagation, fire detection and alarms, suppression and extinguishment, and methanometry. Proven systems are still lacking for quenching ignitions of methane at the face, for timely detection of fires in unattended areas, for assuring that a coal dust explosion can be extinguished before it grows to catastrophic proportions, and for isolating and sealing underground fires without sending workers underground.

Better techniques will be developed for building in mine passageways air tight and water tight seals from the surface through boreholes. A simulated test of these techniques will be conducted to evaluate them and determine suitability for inclusion into current regulations. Instrumentation will be updated in the multi-entry underground explosion facility at Bruceton to improve evaluation of both passive and triggered barrier research. Improved methane monitoring systems and methanometors will be developed to overcome deficiencies inherent in present day designs.

In the Appalachian region the coal seams are intersected by thousands of abandoned oil and gas wells. Protective pillars that P.L. 91-173 requires around these wells impose severe constraints on mining coal. Permanently plugging a well below the coalbed and then mining the pillar offers a method of improving mining conditions by elimination of random pillars, improves ventilation, simplifies the haulage system, and permits longwall and shortwall mining. In cooperation with mining companies, work will be continued on validating techniques for plugging abandoned oil and gas wells so that they can be mined through safely.

Methane in coal mines has created a hazard ever since underground methods were adopted and is expected to become more of a problem as deeper coalbeds are exploited. Very often in mechanized working areas, the rate of methane emission is so rapid that the quantity of ventilating air is not sufficient to keep the concentration of methane below the danger limits. Periodic stopping of coal production is required to let the ventilating air lower the methane concentration. Studies will be continued to relate physical properties of coal and structural features of coalbeds to the presence, movement, and emission of methane. Also needed are engineering criteria for measuring and predicting, in advance of mining, the quantity of methane in a block of coal, the pressure under which it occurs, and the coalbed characteristics that govern its movement. Efforts will be continued on developing practical methods which remove large volumes of methane before mining begins and which control drainage of methane from the solid coal ahead of the working face. Improved ventilation systems to dilute methane effectively in the working areas and control emission from the gob areas will be continued.

In the event of a major disaster, coal miners could be saved by improved survival and rescue technology. The most critical needs are life support equipment to sustain miners during escape and entrapment, techniques to detect and locate trapped miners, and improved equipment for mine rescue teams. Research will be done on life support systems for refuge chambers, improved oxygen sources for personal escape breathing apparatus, and an improved helmet for rescue teams. Other work will advance the capability of seismic and electromagnetic methods for detecting and locating trapped miners, a fixed-station emergency call box, probes for communicating and for assessing the underground environment through boreholes, and portable gas detection instrumentation kit for rescue operations.

The Bureau proposes to replace two temporary buildings, constructed in 1941, at the Pittsburgh Mining and Safety Research Center, Bruceton, Pennsylvania. Replacement is considered high priority as the buildings are no longer structurally sound and present real fire and health hazards. A two story, concrete block, brick-veneered structure estimated to cost $425,000 will house offices as well as laboratories for industrial hazards research, fire and explosion research, methane control research and the documents library. The second building is estimated to cost $240,000 and will centralize the materials handling research laboratories now split between Pittsburgh and Bruceton. All personnel at Pittsburgh Mining and Safety Research Center will now be consolidated at the Bruceton site.

Metal and Nonmetal Mine Health and Safety Research: $4,624,000 (increase, $300,000)

Health and safety conditions in metal and nonmetal mines can be improved through research. Although some of the results of research on coal mining are also applicable to metal and nonmetal mining, the latter presents different problems.

Silicosis, asbestosis, and other dust related lung diseases have long been recognized as serious diseases. The respirable dust research program has the objective to develop technology which will reduce respirable dust concentrations below the ACGIH-TLV limits for airborne contaminants, (American Conference of Governmental Industrial Hygienists - Threshold Limit Values). Research will concentrate on dust control techniques and equipment for control of dust at chutes, dumps, and crushers.

In most metal and nonmetal mines, a good ventilation system that provides a safe and healthful atmosphere is difficult to establish and maintain. The distance that the air must travel from the surface to the working places and the resistance to airflow in the airways results in ventilation systems that are complicated, costly, and sometimes potentially hazardous. Ventilation systems must be developed that provide suitable control of the quantity, quality, temperature, and humidity of the mine air. The problems of ventilating vein type, multilevel mines and those with openings of large cross sections, will be emphasized.

On July 1, 1971, four WLM (working level months) per year became the Federal maximum limit for radiation exposure allowed for each man working in the uranium mining industry. This was a three-fold reduction in radiation levels previously permitted and imposed a need for improved control technology, a personal dosimeter, and improved monitoring instrumentation. Research is underway to develop a personal dosimeter to measure the miner's exposure to radiation. More work will be done on control measures to prohibit radon gas emanation into the working areas and on control or removal of radon daughter products from ventilation air.

The Industrial Hygiene activities are essentially a continuation of work begun during the past two years towards development of improved monitors and alarms for toxic gases found in underground mine air. Emphasis will be on improved alarm systems for diesel engines operated underground. More work is scheduled on characterization of organic materials from diesel engine exhaust emissions. New instruments for detecting and monitoring toxic gases in mines will continue with emphasis upon electrochemical and metaloxides-sensor devices.

Within the safety area, ground control problems are the leading cause of accidents in metal and nonmetal mining. The working face, because of the unsupported roof conditions, is the site of most roof fall accidents. Failures of large areas, due to poor overall mine design, can threaten the entire mine. Proposed projects will cover design standards for determining the overall stability of large underground mines, systems to detect and warn of impending roof falls, rock slides, and rock bursts, and standards for the use of fully-bonded roof bolts.

Fire detection and extinguishment systems in metal and nonmetal mines are complicated because of extensive vertical and horizontal interconnections between working levels. Present knowledge and instrumentation are inadequate to meet the requirements of proposed fire safety regulations. Fire research will emphasize techniques for extinguishing established underground fires in a typical metal mine as well as methods for early warning. Improved fire sensors and automatic extinguishment systems on underground equipment are needed. Full scale testing of fire isolation and extinguishment techniques will be initiated in an underground mine.

Improved voice communications and surveillance systems that will also be functional in an emergency are needed. An adequate communications and surveillance system could well have reduced the loss of life in the Sunshine Mine disaster where 91 lives were lost. Systems will be built and tested for communicating with trolleyless locomotives, roving miners in the stopes, and for monitoring such critical mine parameters as carbon monoxide, air flow, and temperature.

A serious problem at the Sunshine Mine disaster was shown to be emergency communications. The development of wireless voice communications equipment will be completed and tested for hoists in deep shafts and a through-the-earth electromagnetic system for detecting and locating trapped miners will be improved and tested at mines of various depths and geologic overburdens.

ADVANCING MINING TECHNOLOGY $57,450,000

Explosives: $603,000

The Organic Act which established the Bureau of Mines specifically directed the Bureau to investigate the safety of explosives and other hazardous-related materials and devices. Through continuous research since 1910, substantial improvements have been made in the safe use of explosives in mining. At the request of government agencies or industry groups, investigations of hazardous materials are made. This highly specialized work requires unique facilities and scientific personnel which are not generally available in industry or other government agencies.

Safety characteristics of permissible explosives need to be continuously monitored. The recent appearance of permissible water-gel explosives on the commerical market will require a concerted effort in this area to assure their safety in underground operations. Investigations will continue on establishing more meaningful coal dust-gas-air incendivity test to replace present schedule requirements and hazards of aluminized ANFO in the presence of pyrites. Work will be accelerated to maintain a comprehensive data base covering the performance and sensitivity of new commercial explosives with emphasis on the two component explosive systems. Post-detonation identification of explosives will be expanded to provide a much needed tool for uncovering infractions of safety regulations covering the use of permissible explosives as well as assistance to various law enforcement agencies concerned with the illegal use of explosives.

Advancing Coal Mining Technology: $46,500,000 (increase $38,700,000)

The energy situation has focused attention on coal, our most abundant energy resource. An essential part of any R & D program devoted to making coal the mainstay of our fossil fuel system must include a substantial effort to rapidly upgrade coal mining technology to produce the quantities of coal required at acceptable economic, environmental, and social cost.

Surface coal mining has received increased attention recently because of its associated environmental problems. This problem is particularly acute in the Appalachian region, the source of much of our present surface production, where environmental problems are well documented and in the fragile ecosystems of the west where large reserves of low sulfur subbituminous coals and lignites occur. In addition, worker productivity, after increasing for years, decreased more than 20 percent in the last three years resulting in sharply increased cost.

The Bureau's surface coal mining R & D effort concentrates on the development and demonstration of effective reclamation technology through the development of integrated mining and reclamation methods to reduce aesthetic and ecological

disruption. Improved equipments to increase mining and reclamation efficiencies are also under study.

The Bureau program will concentrate on such things as improvements in soil building and revegetation techniques, the development and demonstration of cost effective haulback techniques to replace the disturbed overburden immediately behind the mining operation and the development of specialized equipment to more completely extract the coal, eliminate highwalls, and recontour the land.

Underground mining technology presents a difficult problem because of the complexities imposed by nature on the methods and systems used. The decline in underground mining productivity is even worse than for surface mining and costs have risen dramatically in the last three years. There are two basic mining methods and four equipment systems used for underground mining in this country. Room and pillar mining methods, such as that shown in Figure 2, use either the conventional mining system shown or the continuous mining system.

This method, while extremely flexible in equipment application, is limited to seams 10 feet or less in height, is discontinuous, and leaves about half the coal in the ground as pillars to support the roof.

Caving methods utilize either the longwall system shown in Figure 3 or the shortwall system presently being introduced in this country by the Bureau. These systems while more continuous and permitting more complete extraction are also limited in seam height capability and need more complete adaptation to American mining conditions before their promise can be realized. The Bureau's coal mining R & D program will produce improved systems based both on departures from these present technologies and on the development of novel technology.

The automated longwall subprogram will accelerate the process of adaptation of this equipment system to our mining conditions and will ultimately result in a system in which appropriate human functions are replaced by machines. The initial effects will concentrate on such things as the introduction of shield supports which enclose the working face with a skin of steel, the initial design of the automated systems, construction of a prop test facility which can simulate roof loads encountered in American mines, and development of improved cutting machines and ventilation systems.

The results of continuous face to preparation plant coal haulage system subprogram will relieve one of the principal impediments to higher productivities in today's underground mining sections. The present processes which require frequent transfers of broken coal (miner to shuttle car, shuttle car to belt, etc.) result in obvious subsystem mismatches. The Bureau's program will produce such things as continuous face haulage systems, hydraulic transport systems, and suitable hydraulic pumping test facilities. The automated continuous roof support subprogram will improve the speed and reliability of roof support operations and increase the overall efficiency of the mining cycle. Similarly the automated/remote control continuous miner subprogram, by developing specialized machines for increasing coal recovery and by freeing the operator from routine machine control functions, will eliminate subsystem mismatches and increase system performance.

The Bureau's health and safety research program has yielded the basic knowledge of methane removal technologies and some applicable techniques have been demonstrated for the Pittsburgh and Pocohontas coalbeds. This program will be coordinated with and augment the continuing health and safety research program on methane removal. Use of advance degasification techniques may make mining feasible from coalbeds not now considered exploitable. In addition, this pro-

gram will be directed to the development of techniques for collection of the methane gas so it can be utilized. The gas produced through application of these technologies could significantly reduce the shortage of natural gas.

One of the novel technology subprograms of particular promise is the high speed coal mine development subprogram. Development, in this context, is the process of driving the underground or surface to underground openings required to allow mining to proceed. By adaptation of tunnel boring machines used for water and vehicular tunnels, and development and demonstration of a new generation of machines tailored to the task of coal mining, the Bureau will provide the technology required to decrease the lead time to attain the productions required.

Underground mining, while less associated in the public's mind, with environmental damage, does present considerable environmental dangers, chiefly through subsidence, acid mine drainage, and disposal of mine wastes. The Bureau's subprogram in this area will provide the technology necessary to engineer mines to prevent the damage now associated with surface mining.

The Bureau will also undertake cooperative research work with the Geological Survey and the Bureau of Sport Fisheries and Wildlife. These cooperative efforts are of two broad thrusts. The first concentrates on the development of environmental baseline data to evaluate the effects of existing and developing mining and reclamation technologies. The second concentrates on the collection of data on the quantity and quality of the Nation's coal reserves and the analysis of these data to provide the information required for policy decisions and for the identification of highest benefit targets for the proposed mining technology R & D effort. These efforts together with the research, systems development, and construction of facilities such as a simulated surface mine, or the hydraulic or mine roof test facilities referred to above will assure that the coal mining technology required by the Nation will be available in the shortest possible timeframe.

Advancing Oil Shale Mining Technology: $5,600,000 (increase $5,600,000)

The R & D program is structured to provide the technology needed to produce the mining and waste disposal technology required to extract these materials in an acceptable manner. The fiscal year 1975 program primarily concentrates on preparatory efforts for the sinking of a shaft near the center of the Piceance Basin and the determination of the nature of the problems associated with surface and underground disposal of waste materials from oil shale processing.

The underground mining methods now being used to obtain samples for oil shale retorting are based on the methodology established by the Bureau at the Government's Anvil Points Mine 20 years ago. This technology, while suitable for selective mining of the rich shallow deposits at the edge of the basin, is not suited to underground mining on the scale at the depths now required in light of the energy situation. Hundreds of billions of barrels of oil may be irrecoverably lost unless economical methods of completely mining the total thickness of these deposits are developed. Development of these mining methods in turn depends on our ability to provide the techniques and systems to sink the necessary shafts, control the groundwater, support the openings, and mine and handle tremendous tonnages of raw and spent shale. The Bureau proposes to sink a deep shaft to investigate and develop solutions to the groundwater problems, to obtain access to shale and associated carbonate mineral samples for laboratory work, to perform in situ stress and fragmentation studies, and to begin the development and demonstration of satisfactory mining technologies.

Another facet of the mining R & D work will be the continuation of investigations of the surface mining techniques which could be used to extract these shales.

Presently attention is focused on large scale single-pass mining systems which would minimize surface disturbance and completely mine these formations.

Another aspect of the technological problems associated with either surface or underground mining of oil shale is the surface disposal of processed shale, either through reburial in surface miningy, by disposal in underground mines or in prepared surface banks. The first year of this effort will concentrate on investigation of pile stability and revegetation. Factors to be studied include particle size, carbon residue, compaction, cementation, chemical stabilization, and control of erosion and leaching. Both the mining and disposal R & D work will be largely done under contract.

Advancing Metal and Nonmetal Mining Technology: $4,747,000

This research program is divided into three categories: (1) application of existing technology to immediate problems, (2) mid-term (3-5 year) research on critical mining problems and (3) exploratory work to define technologies which will be required for future mining systems.

Application of existing technology to mining problems will include solution of fragmentation problems in difficult mining situations, investigations of potential subsidence problems in environmentally critical areas, assistance to States in development of air blast criteria related to blasting operations; and demonstration of safe disposal of mine wastes. These assistance/demonstration efforts may require as little as a few weeks or as much as a year to complete. Projects will be chosen which promote both the transfer of technology and the solution of problems critical to the industry and society as a whole.

Mid-term research is problem oriented and directed toward present mining systems. Solutions to these problems require technology that permits economic mining with acceptable environmental impact. For example, one problem common to all mining methods involves ore body delineation and definition. This process is increasingly difficult for deeper and lower grade deposits. Extraction of information on physical rock mass characteristics from a limited number of small diameter boreholes is required. The specification and development of low cost, rapid diagnostic techniques will be targets of FY 1975 research.

Block caving, practiced in Colorado and Arizona, is a promising high volume, low cost method of mining massive low grade deposits on which the Nation must depend for future mineral supplies. Parameters which control caveability of an orebody must be determined and this knowledge must be incorporated into improved mine layouts, undercutting to initiate caving, and ore removal. There is a need for better mechanical and drill and blast excavation systems as well as improved rock support materials and installations. Improved material handling techniques and waste disposal schemes are also needed.

Problems associated with the mining of thick bedded deposits will be explored. Examples of specific commodities associated with this form of occurrence are potash and the lead-zinc minerals deposits of the central U.S. Changing mining economics dictate the requirement for mine outputs considerably in excess of today's mines. Problems such as the disposal of waste materials will be considered. These wastes could provide support to prevent subsidence and thus be disposed of in an environmentally acceptable manner. Improved mining procedures to incorporate fill techniques must be sought.

Surface mining is another area requiring particular attention in these times of increased environmental concern. Of particular concern in the FY 1975 program are improved methods of mining which incorporate preplanned reclamation to

reduce both the immediate impact of the mining and the long term environmental problems.

The third category of research includes a continuing but limited exploratory investigations of novel systems and fundamental rock excavation processes. Examples of investigations in this program include such things as the analyses of novel mining, reclamation, and ultimate utilization systems, mechanisms of subsidence, and fragmentation.

EXAMPLES OF RECENT ACCOMPLISHMENTS

Coal Mine Health and Safety Research:

To speed up the use of coal mine health and safety research results, the Bureau of Mines has acted to get the information into the hands of people in a position to put it to work, in the fields of mine design and instrumentation, methane control, mine communications, and plugging abandoned oil and gas wells pentrating coalbeds. Special "technology transfer" seminars have been held for this purpose as well as briefing in mining areas across the United States usually in conjunction with regional mining associations annual meetings. The Bureau's open briefings are less technical than the technology transfer Seminars, and serve as status reports to the mining industry on promising research results. Both the seminars and the briefings have been extremely well received by management and labor.

The first in a series of printed "Technology News" is being prepared for distribution as a concise, definitive, results oriented summary, highlighting new developments from the Bureau's health and safety research program. "Technology News" will go out several times a year to potential technology users. For permanent use by the technical community, several Bureau research reports and numerous coal mine health and safety research reports by contractors have been released to the public. In addition, results from in-house and contract research programs have been demonstrated at meetings of the American Mining Congress and the United Mine Workers of America Convention, and at the Bureau's own experimental mine at Bruceton, Pennsylvania.

Experimental equipment has been developed and put into operation to evaluate continuous mining machine parameters for the purpose of reducing generated respirable coal dust. Cutting variables such as bit speed and depth of cut were optimized in extensive lab studies and confirmed in scaled down pilot tests. These are now being evaluated. A full-size research model of continuous mining machine is being used experimentally under actual underground mining conditions as part of the Bureau program. Based on earlier laboratory work, it is expected that coal can be cut in ways that generate less dust and use less electric power.

Through Bureau research, a miners exposure to underground noise can be measured better, to protect against excessive exposure that can lead to deafness. Quieter coal mine drills have been developed. Use of a sound damping alloy to construct a pneumatic percussive drill was shown to reduce the noise level about 2 dbA. Four compact, durable prototype mufflers were developed for portable pneumatic percussive drills that substantially cut air-exhaust noise during operation of the drills.

In research to help safety standards for use of diesels in underground coal mines, Bureau tests showed that exhaust "rebreathing," which can occur if underground ventilation is disrupted, can quickly cause a hazardous increase

in carbon monoxide levels. With methane added to the intake stream of a diesel engine at a level of one percent in the mixture, ventilation requirements tripled because of the greatly increased carbon monoxide emission rate.

Sampling for toxic gases in mines, which has been complicated by the bulky glass sample bottles that must be carried into the mines and then sent to a laboratory for analysis, may soon be simplified because of research developments. Small stainless steel sample tubes were developed that can replace the 250 ml glass bottles, and oxygen, methane, carbon dioxide, and carbon monoxide analyses can now be done by a portable gas chromatography unit, which an inspector can use right in the mine.

Methane gas can be ignited by the frictional sparks given off when the coal-cutting bits on a mining machine strike quartz and sulphur inclusions in the coal seam. Research at the Bureau's experimental mine at Bruceton, Pennsylvania, showed that the initial flaming with a gas-air-mixture could be detected and suppressed in time to prevent the development of a mine explosion. Prototype detection and suppression systems have been developed for use on coal-mining machines. Four such devices are being tested on continuous mining machines that are being used in gassy coal mines in West Virginia.

The need for technology for remote sealing of mine fires was demonstrated by the coal mine fires at Blacksville, West Virginia, and at Nemacolin, Pennsylvania. Since those disasters, techniques have been developed for constructing air- and water-tight seals from the surface through boreholes into the mine. During a mine demonstration in West Virginia, three passageways were sealed by such methods, including a massive 4-way intersection. Before this was developed the only alternative was to try to isolate the fire zone by direct, manual construction of seals. However, because the atmosphere in the area being sealed becomes toxic and explosive, this approach is extremely hazardous, and has claimed many lives.

One of the today's major tasks in coal mine safety is handling the enormous quantity of methane released as coal is cut. As deeper seams are worked, even larger amounts of methane will be released. The use of shafts or boreholes to degasify coal seams before they are mined is now being evaluated as a possible solution. Methane emission from one large (shaft-size) borehole was more than 600,000 cubic feet per day, and after nine months had totaled 145 million cubic feet. This is equivalent to the methane contained in about 635,000 tons of coal in the test area. Interest has been growing in using this methane as an energy source, rather than wasting it, and the cooperating coal company is currently preparing to channel it into a commercial pipeline.

Monitoring vertical boreholes drilled into solid coal far ahead of mining has shown that dewatering the coal is a key to successful degasification. Preliminary results indicate that direct gas measurement on exploration cores can be used to estimate coalbed gas content and predict approximate methane emission from a prospective mine in the coalbed at the exploration site. By hydraulically fracturing a horizontal hole in the Pocahantas No. 3 coalbed, the gas and water flow rates were increased. Hence, water infusion and possibly natural drainage through horizontal holes could become feasible underground control techniques for this coalbed.

In the Pittsburgh coalbed, studies during development of a set of headings into major coal panel which has been completely isolated for 12 months by other sets of headings indicated that the average methane emission rate within the panel was more than 70 percent lower than the rates measured in development within two virgin areas of the same mine. Results from the study point to planned isolation of large blocks of coal as an effective gas control measure.

The effectiveness of the Bureau's plugging technique for sealing abandoned oil and gas wells that penetrate coalbeds was further documented as eight wells plugged by coal companies under cooperative agreements with the Bureau were monitored for procedures and integrity of seals. Results can be used in Government consideration of new standards for mine safety.

Experiments were conducted to determine the validity of the Standard Roof Bolt Anchorage Testing Procedure as established by the American Mining Congress for determining roof bolt anchorage capacity. The main criticism of the Standard Roof Bolt Anchorage Testing Procedure has been the rapidity of the test, which prevents time-dependent reactions from developing at the anchor-rock interface. Bureau experiments showed the time effect insignificant and validated the Standard Testing Procedure for determining anchorability qualities of strata and the anchorage capacity of bolt anchors.

Techniques to strengthen rock in advance of mining were tested at a coal mine in West Virginia. This test showed that a friable coal mine roof can be successfully bonded into a more competent structure. About 44 linear feet of the coal mine roof was injected with an epoxy resin through 10-foot cut holes drilled into the roof strata ahead of the face. A 10-foot cut of coal was taken and the injection cycle repeated. Core samples taken after mining was completed showed that the polymeric material was completely cured, and that cracks as fine as 1 mil had been bonded. The material filled and bonded cracks up to 1/8-inch wide.

Permissible infrared viewers constructed under a Bureau research contract have been field tested for hazard detection in and around coal mines. The devices detected loose roof, coal mine waste dump fires, hidden mine fire zones, and overheated bearings. The Federal Coal Mine Health and Safety District Office at Denver, Colorado, now has ordered an infrared scanner for routine use.

Coal mine "bumps" were microseismically monitored for the first time in a coal mine at Carbondale, Colorado. Origin of the "bumps" (rock and coal outbursts) was, in general, associated with the active mining area, major structural features, or potential failure area. Data so far indicate that failure areas can be delineated in time to take remedial action.

There is considerable interest in improving the safety of underground machine operators by introducing remote, semi-automatic, or fully automatic controls for mining machines used in the face area and for shuttle cars. Sensor systems for obstacle detection and guidance aids for shuttle cars were successfully demonstrated in an operating coal mine. The guidance aids permit steering the shuttle car "blind" by observing a meter. The detectors warn the operator of obstacles in the path of the shuttle car. A laser-guided alignment sensor for continuous mining machines was also demonstrated in an operating coal mine.

Protective canopies on "low-coal" electric face equipment offer sorely needed protection for machine operators in thin-seam mines. Adjustable canopies were designed, fabricated, and installed on two shuttle cars, a cutter, a drill, a loader, and a roof bolter. In two mines in southwest Virginia, where the canopies have been in use for only 2 to 5 months, the results are promising.

In the Bureau's Inherently Safe Mining Systems demonstration project, one complete section of conventional equipment has been approved, and extensively modified to provide greatly improved operating safety characteristics. Moreover, new equipment items, such as an automated bolting machine, are nearing completion. The conventional equipment has been shipped to the test site and is ready to be moved into the mine for the beginning of demonstration and

evaluation work. The test site was specifically developed for this demonstration but will also serve for other testing and demonstrations, including long-term fire and explosion testing.

Technology for mine illumination was developed to facilitate promulgation of standards. Visual tasks in underground coal mining by conventional, continuous, and longwall methods were identified for work spaces inby the last open crosscut and at transfer points, and the minimum luminance requirements were designated for performing these tasks. This establishes a basis for prescribing improved illumination in underground coal mines. First-generation mine lighting systems, using circularly polarized, high-pressure sodium lamps, were evaluated in "high coal" in an operating mine. The system using portable lights in both conventional and continuous-miner sections achieved the desired level of illumination in accordance with proposed standards, as did the system using machine-mounted lights. Low maintenance requirements and general acceptance by mining personnel were realized. Modified portable area and machine-mounted lighting systems were designed, fabricated, and delivered for evaluation in operating mines.

Two continuous mine environment surveillance systems have been developed and are being tested in underground coal mines. One of the systems has been installed in the Bureau's mine in Bruceton, Pennsylvania, for demonstration and research. The system, comprising one surface station and 10 underground stations, monitors smoke, noise, carbon monoxide, methane, hydrogen, temperature, rate of temperature rise, and air flow. An alarm sounds when a dangerous condition is detected and the problem and its location are identified at the surface station. The other system has been installed in a major operating coal mine. It monitors methane, carbon monoxide, air flow, and temperature in both the intake and return airways of two mining sections. Sensor data is transmitted over telephone lines to a surface monitor station where any dangerous conditions are indicated.

In the first comprehensive measurement of electromagnetic noise data in working sections of operating coal mines, an electromagnetic noise measurement system was designed, assembled, and used to collect background noise data in five underground mines. The noise data base will be invaluable to designers of mine communications systems. A mine pager interconnect system has been developed that permits mine paging telephones to be connected with the public phone system for improved emergency and off-hour, nonemergency communications. This system soon will be installed in an operating mine in West Virginia.

A major advance has been made in technology for detecting and locating trapped miners. Using a new electromagnetic system, signals generated from the surplus energy of a miner's cap lamp battery can be detected by receivers suspended from a helicopter. The helicopter receivers permit a rapid rough position fix, and receivers on the ground can then obtain a more exact location. The system has been tested successfully at five coal mines in Pennsylvania, West Virginia, and Utah. Signals have been detected on the surface through overburden as thick as 1,600 feet. Location accuracy has been within 50 feet at mines under overburden up to 1,000 feet thick.

A fixed communication station has been developed and tested successfully at the Bureau's experimental mine. This station can be used during an emergency for communicating by voice with trapped miners and during normal operations for monitoring a critical mine operating factor. Both voice and monitor transmission is possible through overburden of 600 feet. A two-inch diameter probe has also been developed for communicating with trapped miners and analyzing the mine air through narrow boreholes. The new probes are smaller in diameter and lighter than previous versions.

Several recent mine fires have further demonstrated the need for improved emergency breathing apparatus. Two improved oxygen-producing breathing devices were developed for emergency escape, a model weighing 2.5 pounds and providing a 10-minute oxygen supply and one weighing 4.1 pounds and providing a 1-hour oxygen supply. The 1-hour device alone, or in combination with the 10-minute device, could be a replacement for the currently used 1-hour self-rescuer, which is ineffective in mine air containing less than 16 percent oxygen or more than 1 percent carbon monoxide.

Metal and Nonmetal Mine Health and Safety Research:

Mining metals and nonmetals is similar to coal mining in some ways, but is different in even more ways. There are unique health and safety problems in metal and nonmetal mining, and a separate research program in the Bureau of Mines is at work on developing new approaches to health and safety technology in the Nation's noncoal mines.

The removal of "radon daughter" particles from mine air is one approach to the elimination of the health hazard from radiation in uranium mines. An electrostatic air cleaning unit for collecting radon daughter products was developed. A new prototype portable field filtering unit, which can use either a plastic bead filter element or a new paper filter suitable for humid mine air, was also built and is now available for scheduled underground testing.

Better information on ventilation air flow is important to the health and safety of miners who work in complex passages typical of many metal mines. Tests using a trace gas technique that was developed for observing the course of ventialation air in mines showed it to be an excellent method for evaluating air recirculation and the transit times of air in metal mines and for determining air flow volumes, velocities, exchange rates, and auxiliary fan effects in large airways with velocities too low for standard anemometer methods.

Prototype devices are being developed to monitor a mine atmosphere, to detect and measure the presence of CO (Figure 4) and NO_2 in concentration injurious to a workman's health, and to give a warning. The devices also warn when the oxygen level is dangerously low. These portable devices use selective electrochemical cells and are designed to be rugged, lightweight, battery-powered, and compatible with the conditions found in underground metal mines. Testing of commercially available sensors for these units has been completed; modification and repackaging into a portable area alarm is now underway.

Diesel engines are extensively used in metal mines and equipment and procedures to warn of unsafe levels of carbon monoxide, carbon dioxide, and nitrogen oxides in diesel engine exhaust have been developed. Of the several types of monitors investigated by the Bureau, a nondispersive infrared (NDIR) analyzer was found to be superior for monitoring carbon dioxide and will undergo field testing. Candidate nitrogen oxide monitors include instruments based on the principles of electrochemistry and chemiluminescence in conjunction with a thermal convertor. Second generation carbon monoxide instruments based on NDIR, electrochemistry, and other principles are being investigated.

The 100-ton capacity truck was identified as the type of large, mobile metal mining equipment most prone to fire. A fire control system was successfully installed and field tested on an ore truck at the Pima Mine, Tucson, Arizona. Test fires set in the engine compartment and brake grid areas were automatically sensed and suppressed. An actual fire during the test period was automatically suppressed without injury to the operator or damage to the machine. Safety and management personnel at the mine are now very enthusiastic about this successful development because it protects expensive equipment as well as drivers.

A field test for evaluating the effectiveness of shotcrete (sprayed concrete) for mine roof support showed that shotcrete can successfully support relatively wide, laminated shale roofs. Of three 22-foot-wide test rooms in laminated shale, one was supported by the standard roof bolt plan augmented with a 2-inch-thick application of shotcrete which showed only some initial cracking near the end of the test area due to blasting damage. Another, supported only with a 6-inch-thick application of shotcrete, showed no sign of failure. The third room, using temporary supports, failed a short time after the temporary supports were removed.

Demonstration of a battery-powered vehicle patterned after a surface all-terrain vehicle showed that it is a feasible conveyance for expediting underground mine rescue and recovery operations. The first-generation vehicle is equipped with: a self-contained oxygen supply for two operators and two rescued miners; 10,000-foot-range, voice communications equipment; a trailer for transporting rescued miners or supplies; and instruments for taking gas measurements in mine air. The vehicle can traverse 12-inch-diameter logs, climb 45-percent grades, and operate in mine openings as small as eight feet wide by four feet high.

Advancing Mining Technology:

Besides the heavy investments it is making in new health and safety technology for the Nation's mines, the Bureau research program also extends to research aimed at improving mining efficiency, and at solving technical problems that currently limit commercial access to needed resources.

In this country 40 percent of our silver is mined from narrow, near-vertical veins. To support the walls of these openings, mill tailings (finely crushed rock particles) left over after ore processing are piped back underground to fill worked out areas. Large-scale tests in Bureau of Mines research laboratories have shown that the bearing capacity of unclassified mill tailings can be greatly increased by electrokinetic treatment. Application of a pulsating, low-density electrical current (0.23 amps per square foot) results in significant dewatering and composition of ungraded tailings. The technique will be tested in an underground stope this coming year to demonstrate that unclassified mill tailings can be used for backfill to provide a full measure of ground support.

The Nation's oil shale deposits represent a potential resource of 2,000 billion barrels of petroleum. The energy "crisis" has made these deposits more important in our energy future. But a number of problems in the development of deep mining and waste disposal remain to be solved. The present underground mining technology for oil shale was developed at the Bureau's experimental mine at Anvil Points, Colorado, in the 1940's and 50's. The basic mining pattern for these thick deposits consists of mining out a series of rooms, leaving tall, slender pillars of shale to support the roof. Research on the strength of such pillars has shown that extraction ratios can be increased by placing spent shale (material left after oil is extracted) around the pillars. The spent shale provides lateral support for the pillar and thus increases its ultimate strength. Bureau research demonstrates that finely ground particles of spent shale can be compacted and advantageously used underground.

Hydraulic transportation is an efficient method of moving coal, iron ore, and other bulk materials over long distances. Despite its relatively widespread and successful use on the surface and despite the need for such a system underground, hydraulic transportation has not yet been successfully adapted for underground mining. Research is underway to establish the basic variable factors involved in hydraulic movement of materials. Tests with various shapes of glass particles, limestone, and gravel have shown that the effect of particle shape is insignificant and can be ignored.

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The deep mines of the United States are becoming increasingly important to the Nation's mineral resource base as deposits nearer the surface become depleted. A major problem in deep mining is danger of rock bursts--sudden, violent disintegration of hard, solid rock. In an attempt to develop better understanding of basic mechanics involved in rock bursts, comparative rock pressure measurements were made by the Bureau at comparable depths in the Homestake mine, near Lead, South Dakota, where rock bursts are essentially unknown and in the Coeur d'Alene district of Idaho where rock bursts are frequent and constitute a serious hazard. Bureau measurements showed that the average horizontal stress components were five times greater in the Idaho mines. The findings support the premise that in-situ stress is a significant factor in rock bursts. A borehole gage has been developed for stress measurements in rock where structural discontinuities, or high stress levels, do not permit conventional measurements. The gage was successfully used to measure stresses in oil shale near Rock Springs, Wyoming, where earlier attempts had failed.

Early knowledge of the location and configuration of concealed faults permits more effective mine planning and operation. Horizontal resistively profiling techniques were successfully in Bureau experiments to trace faults over long distances in the Gas Hills district of Wyoming. The tests were made in an area where the faults are covered by alluvium and cannot be detected by aerial photography or surface mapping.

Room and pillar mining is still the most popular method of mining bedded deposits which are sources of many vital mineral resources, including lead and zinc. Productivity is limited by the amount of rock broken in each drill-blast-load cycle. In an attempt to increase blasting efficiency, the use of a prebored, large-diameter burn holes were tested by the Bureau at the While Pine mine, in Michigan. Conventional burn holes are usually the same size as blast holes and provide a free surface to which blast holes can break. In this test, a specially designed drill was used to bore a 50-foot-long, 12 1/8-inch-diameter burn hole in a 9-foot by 21-foot heading. A series of full-face rounds ranging from 12 to 18 feet long were drilled and blasted around the oversize burn hole. In each case, the heading was advanced the full depth of round. Fragmentation and distribution of loose material were excellent. (By comparison, the standard 12-foot V-cut blasting round used by the mine in this size heading averages only 8 to 9 feet of advance per round.) In addition to increased productivity, the use of large diameter burn holes appears to lessen roof damage from blasting.

In-situ leaching to dissolve valuable minerals from favorably situated deposits may provide a low-cost means of mining low-grade ores of copper, uranium, and other soluble minerals with a minimum expenditure of energy. One major deterrent to the wider use of in-situ leaching as an economical, safe, and environmentally desirable mining method is the extreme difficulty of creating void space within the ore body for the penetration of leaching solutions. In a 10-hole test blast by the Bureau using 9-inch-diameter blast-holes drilled to a depth of 110 feet on 15-, 20-, and 25-foot centers, an ore body was successfully fragmented to the full depth of 110 feet. Post-shot diamond drilling showed that fragmentation around the 15-foot- and 20-foot-center blast-hole patterns was excellent and that fracturing around the 25-foot pattern was adequate for the percolation of leaching solution.

Criminal use of explosives has increased drastically in recent years and law enforcement officials have been seriously handicapped by lack of any means of tracing post-detonation residues back to the manufacturer and ultimately to the illegal user. A technique is under development by the Bureau for identifying each batch of explosive manufactured by a phosphorescent "signature." The first milestone has been reached by developing a seven-element code utilizing phosphor

grains capable of surviving detonation. However, some of the raw phosphor grains were found to sensitize some explosives. Various coatings for the phosphor grains are being explored that could eliminate this danger. The identification technique could also be used to detect the illegal use of nonapproved explosives in violation of the Federal Coal Mine Health and Safety Act of 1969.

4. Data Collection and Analysis: Fiscal year 1974, $11,357,000; fiscal year 1975, $12,343,000; increase, $986,000. The net increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$ +1,700,000	+ 40	$4,938,000	230	To improve world statistics on mineral consumption and recycling plus to identify and analyze nonenergy mineral problems and develop a projection modeling system.
(2)	-1,500,000	- 35	3,000,000	140	To reduce energy data collection and analysis program, now planned for funding from FEO.
(3)	+682,000	--	--	--	Reimbursement for space, services and facilities provided by GSA in accordance with Public Buildings Amendments of 1972, P.L. 92-313.
(4)	+104,000	--	--	--	Annualization of pay increase granted in FY 1974 (E.O. 11789).
	+986,000	+ 5			

COST FACTORS INVOLVED IN INCREASE

(1) 40 permanent positions, $620,000; personnel benefits, $53,000; travel, $67,000; rent, communications, and utilities, $20,000; printing and reproduction, $58,000; supplies and materials, $36,000; equipment, $44,000; and contractual services, $802,000.

NEED FOR INCREASE

To improve world statistics on mineral consumption and to analyze nonenergy mineral problems: One of the most vital areas of Bureau activities is in the maintenance and application of a minerals intelligence competence. Our purpose is to improve awareness of emerging mineral problems so that an alert Government and industry can take action early enough to avoid crucial problems such as that now confronting us in the energy area. The current mineral intelligence capability is being severly strained by the volume and complexity of demands placed

upon it by Government, industry, and the general public. Growing areas of mineral intelligence program needs include land use decisions, environmental impact assessments, and improved forecasting and evaluation of alternative futures, and of materials policy options.

Although the effort to accumulate, analyze, and disseminate intelligence on minerals is extensive, additional effort and funding are required to make it truly comprehensive. With our increasing reliance on imported energy and other minerals, we need to improve our basic foreign and domestic statistical information, particularly with respect to consumption patterns. This is particularly important as world mineral markets become increasingly competitive and other nations seek ways to upgrade their mineral exports. Improved world mineral trade data would assist our mineral commodity specialists in keeping abreast of the worldwide situation.

The Bureau's domestic mineral industry data collection is the single Federal program directed to canvass industry for such information. Recent increased workloads associated with a new statistical survey on land use and the mine map repositories, as well as continuing commodity surveys, require additional support staff if quality and timeliness are to be improved. Verification of data quality continues as a critical area requiring additional technical auditing to maintain current standards.

A current weakness in the data collection and analysis effort is the inability to provide adequate comprehensive and timely analytical capabilities to intensively evaluate data when critical situations develop. A partial answer to correcting this is the improved use of automated basic information systems capable of data manipulation and retrieval. Essential for complete utilization of improvements in ADP but necessary on their own merits are strengthening of the analytical capabilities as well as reintroducing materials survey work, indepth industry studies, technological trend analyses, program and policy evaluations plus improved forecasting efforts in technological and socio-economic phases of mineral intelligence. To fully utilize the existing talent knowledgeable in the minerals field regardless of their organizational association, contractual agreements would be made with the mineral oriented universities or private research groups for special commodity analysis, economic technical forecasting and modeling studies. This continuing effort would complement the in-house analytical work and also lend strength to the national mineral analysis capability.

The current energy situation depicts the type of problem that could soon exist in many mineral fields. Prescriptive response for Government efforts to combat the situation is an increased desire to identify similar problems in their early stages, analyze them promptly and take corrective actions prior to serious dislocations in the national economy.

The Bureau's mineral commodity specialists form an expert core of personnel keenly aware of many potential problem areas within their areas of responsibility. The increasing demands on their time and talents to assess mineral matters at the same time that new complexities and complications plus availability of more information than ever before seriously strains the current staff abilities. As a means to improve the situation by providing better, more comprehensive and timely data for the commodity specialist as well as other interested parties, in-house capability to translate foreign technical documents on mining, metallurgy, and other mineral industry specialties would broaden the data base now available for analysis. Intimately connected with this translation service is an abstracting service of mineral and related industry literature so that specialists can assign their main effort to problem identification and analysis.

Another area that strongly influences the viability and economic well-being of our industrial society is technology. Single or multimineral commodity problems may arise and because of the strong functional orientation applicable to technological problems and solutions, assessments frequently are approached from either view. The Bureau's mineral commodity specialist represents the focal point in commodity oriented technology applicable to his industry area of responsibility. However, formal mineral and related technology assessment is not currently being carried out in the data collection and analysis operation so these specialists do not have access to data necessary for them to totally advise of the impact. This can be essential since leadtime is needed to dampen the adverse affects of technology and also to identify weak or neglected technology areas. Correction of this situation could lead to better technology transfer and subsequent improvements in such areas as labor productivity or energy conservation.

PROGRAM STATEMENT

The objective of the Bureau of Mines data collection and analysis program is the development of a coordinated body of basic minerals intelligence for Government and industry policy, planning, and decisionmaking. One element of the Bureau's data collection is the single Federal program directed to canvass industry for such information. The knowledge developed through analyses of these data provides a basis for assessing the domestic and world mineral resource situation and anticipating changes in supply and demand patterns. This knowledge serves as an indispensable planning guide to the Bureau's research organization and represents an important input to the Bureau and Department policymaking procedure. It also serves as a major input for the Secretary's report to the Congress on the state of the domestic mining and mineral industries under Public Law 91-631.

The principal method of disseminating results of data collection and analysis efforts to the public is through periodic publications. Another is through Information Circulars, special reports and advisory service intended to keep information continuously available as to trends and problems in all phases of the mineral industry including environmental concerns.

Serious mineral supply-demand problems persist within the United States. They compound because of the rapid growth in worldwide consumption of minerals and the increasing complexity of the world mineral supply situation, including the question of environmental quality. Basic to this situation is the fact that domestic consumption of minerals consistently exceeds domestic production. Thus, the United States faces vigorous competition with other developed countries for the mineral raw materials available in world markets. Furthermore, the competition for these mineral raw materials rapidly intensifies through the national aspirations of lesser developed countries to process the mineral raw materials that they produce in order to gain maximum economic benefits from those resources. The situation emphasizes the need to improve an intensive and continuing appraisal of mineral production, trade, usage, reserves and resources.

Continuing analyses in the mineral and energy fields consider the resource quality, and supply-demand relationships of all mineral materials and fuels, not only from domestic sources, but worldwide. The analyses of changes, for example, in energy mix resulting from fuel quality requirements, economic and environmental restrictions, and availability, lead to forecasts of supply-demand relationships and substitutability under alternative simulated conditions. In the energy field these forecasts include analyses of a wide range of technical, economic, and engineering aspects of finding, producing, processing, transporting,

and utilizing fossil fuels including the manfacture of synthetic fuels. Shortages of domestic sources of petroleum and natural gas and delays in nuclear power development focus attention on coal and the problems associated with its near- and long-term availability.

The growing problems of energy and mineral supplies and new environmental restrictions emphasize the need for improved and timely resource information. This program is the only one in Government or industry designed to provide such energy and mineral supply information on a national basis.

The Bureau's efforts in economic analyses direct attention to multicommodity situations for which Government decisionmakers need up-to-date knowledge, namely: 1) the existing situation, 2) trends into the future, and 3) the impact of choosing among alternatives. Typical subjects include overall economic activity as related to the country's minerals industries; the impact of international developments on the domestic minerals industries; capital and labor supply for the mineral industries; and the interactions among mining, costs, prices, environmental controls and tax structure.

PROGRAM OF WORK

Industry Surveys - The Bureau of Mines secures production, consumption, and end-use data for some 90 minerals (metals, minerals, and mineral fuels) by a series of voluntary industry surveys. Information on the volume of production, types of consumption and end-use patterns, and stocks available is obtained through more than 200 statistical surveys encompassing 75,000 respondents. The surveys are conducted monthly, quarterly, or annually, depending on data needs. About 150,000 reports are received and processed per year. The number of line items handled is about 1 million, and the number of information items approximates 7 million.

An important part of the surveys is the development and maintenance of mailing lists of respondents. New mineral producers and consumers must be identified through a complex intelligence network involving State and Federal agencies, trade journals, and associations, and general news sources. Corporate mergers and acquisitions require constant attention to assure accurate mailing lists. Verification of the validity and correctness of the collected data also represents a critical element in the program.

The vigorous competition the United States faces with other developed countries for the mineral raw materials in world markets emphasizes the intensified need for better foreign statistics. Although surveys are not used to canvass foreign operations, critical data are available through a few select mineral attaches, world organizations, and foreign published documents.

Collection of data on mineral deposits of major economic or strategic importance augments the current mineral resource inventory system. Both domestic and foreign deposits will be assessed with a view to determine clearly the mineral supplies available to the United States. Peripheral studies, but nevertheless important in developing mineral supply knowledge, include technology of extraction, byproduct-coproduct relationships, environmental restraints, and the availability of secondary mineral materials.

State and Local Cooperation - The Bureau of Mines works closely with State and local agencies primarily through a corps of 37 Liaison Officers who provide coverage in all 50 States and Puerto Rico. These employees, each eminently qualified in the minerals field, foster and facilitate Federal, State, and local

cooperative efforts in solving supply and environmental quality problems associated with the development and maintenance of a sound mineral resource base for the Nation.

Through close working arrangements with taxing authorities, health and safety organizations, economic boards, and university staffs, the Bureau has access to a large body of knowledge accumulated at the State and local level. Such broad cooperation is aimed at making State mineral information consistent with national data, comparable among States, and in reducing the burden on respondents by avoiding the submission of similar reports to both Federal and State agencies.

Analysis and Evaluation - Trend and correlation analysis of supply and demand for the individual commodities will continue. Productivity forecasts developed from compiled manpower and capital requirements data represent multicommodity analytical effort. The requirement of P.L. 91-631 to evaluate the economic health of the minerals industry will initially focus on profitability, rate of return, cash flow and related indications of corporate vigor. The ultimate goal is an appraisal of the industrial ability to finance investments necessary to sustain the total level of effort in exploration, development, and production required to provide a continuous adequate supply of mineral raw materials. Analysis of tax laws applicable to the mineral industries also will continue.

The Bureau's energy data collection and analysis program particularly concerns the factors and information needed to guide national policy in matters related to the supply and demand of fossil fuels. Continued collection of data on energy sources, particularly coal, petroleum and natural gas, augments the current energy data bank information. Special emphasis will be on improving the responsiveness and completeness of that data bank. Priority will be given to determination of mine productive capacity potentials and mining costs of reserves of metallurgical-grade coal, low-sulfur coals, coal potentially available to support conventional synthetic fuels plants and coal potentially available for underground gasification. Analyzing the impact on the environment of mining, processing, and utilizing energy minerals continues.

In the minerals program, the Bureau evaluates, interprets, and analyzes the technical and economic status of all mineral and metal commodities, ranging from aluminum to zinc, to provide a continuous flow of relevant knowledge. This is essential to the Federal, State, and local governments. In providing essential data, emphasis is given factors affecting the national mineral supply position, requirements, environmental problems (such as air pollution, solid waste disposal, and multiple land use), national defense, international trade, and conservation.

Dissemination of Data - The basic methods of disseminating results of data collecting and analysis efforts to the public are through periodic publications. These include the Minerals Yearbook, Mineral Facts and Problems, Mineral Industry Surveys and the annual Secretary's report to the Congress on the state of the domestic mining and mineral industries. In addition, Information Circulars, special reports and advisory services to such groups as the National Commission on Materials Policy augment those efforts to keep the Government, industry, and the public up-to-date regarding trends and problems in the mineral industry. Response to Congressional inquiries and technical reviews of pending legislation further disseminate available mineral intelligence. The Bureau also provides mineral information and staff participation in activities of United Nations regional organizations, the Organization for Economic Cooperation and Development, the World Bank, etc. Assistance will be provided as requested to the Department of State in the selection of personnel and functions of mineral and petroleum attaches.

EXAMPLES OF RECENT ACCOMPLISHMENTS

While recent years have seen drastic changes in many facets of the metals industry, probably the zinc industry has been most severely dislocated. Two studies delineated recent changes in the zinc supply pattern and reviewed historical developments in the zinc industry. The two reports will aid both Government and industry decisionmakers in taking steps which will assure long term supplies of zinc at reasonable prices.

An evaluation of domestic copper reserves concluded that 83 million tons of copper reserves were available, a quantity approximately equivalent to 50-years' production at the current rate. If the price of copper were increased nearly fourfold, an additional 106 million tons of the metal could be considered a reserve.

A study on the occurrence and recovery of byproduct metals in lead and zinc smelting and refining gave necessary information for directing attention to needed research for improved byproduct recovery in accord with good mineral conservation practice. Any innovation or technologic improvement that affects the recovery or use of the byproducts also improves the overall economics of the copper, lead, and zinc industries.

The economic analysis of the Junk Automobile Problem showed that the supply of junk automobiles to processors is not responsive to the price offered for the hulks. Although the shredder and the portable flattener have improved the problem of excessive hulks in wreckers' yards, the analysis did not demonstrate any effect of these innovations on the problem of car abandonment by the last owner.

An investigation on "Determining the Effects of Gasoline Price on Use of Metals in Automobile Manufacture," showed that if the price of gasoline were to rise to $1 per gallon, automobile sales would be 99 percent economy size cars. The metal requirements for automobile manufacture would decline by 35 percent from what it would be with gasoline at 38 cents per gallon.

The study for a "Statistical Estimation of U.S. Demand for Sulfur" reviewed the technical and economic relationships within the sulfur industry, and sulfur-using industries. Data for the period 1950-1970 are used to build an econometric model of sulfur demand, which is then used to project demand to 1985. The study is divided into technical and nontechnical discussion. In this manner, econometric problems and descriptive material are segregated while analytical results are accessible to all readers.

The Final Program Decision Option Document for the Proposed Prototype Oil Shale Leasing Program was completed. This internal document set out for the Secretary the alternatives to and variations of the leasing program that were available to him. It presented the economics of shale oil production as compared to those of alternative energy sources. The decision to proceed with the program as proposed was announced on November 28, 1973.

Initial evaluations were completed on alumina, copper, fluorine and tungsten deposits for inclusion in the Bureau's automated Minerals Availability System (MAS). When this system is completed, retrieval and analysis of basic engineering, economic, and geologic data will permit rapid evaluation of the availability of minerals under various conditions.

The Bureau-prepared keynote address, given at a Central Treaty Organization meeting in Istanbul, Turkey, reviewed the world fertilizer mineral position. The review focused attention on the current worldwide projected shortages and rapidly rising prices.

A survey of the quantity of land used and reclaimed by the mining industry was completed. The survey furnished data on land use from 1930-1971 by geographic area, by mineral commodity, and type of mining activity. About 3.65 million acres of land have been used over this 42-year span and 1.46 million acres have been reclaimed. The report updates the 1965 Department of the Interior report on land use by the mining industry and provides additional input from an industry-wide survey and from appropriate State agencies.

A computer model of the raw materials requirements of the U.S. steel industry for the next several decades, developed under a Bureau contract to Massachusetts Institute of Technology (MIT), Department of Metallurgy and Materials Science, was used to supply specific output to aid the Departments of Commerce and State with respect to their activities concerning ferrous metals.

Alternative methods of producing steel from iron ores by direct processes were studied. The report described possible effects the new processes could have on raw material consumption, scrap, energy requirements, plant locations and industry structure.

A new annual report series was started in 1970 that outlined recent technologic trends and related developments in the minerals industry. Each report describes new equipment, methods, techniques, and systems used to more effectively extract and process minerals and fuels.

The Bureau continued as the prime Government source of data and analysis for a multitude of energy studies. These include: National and Regional Energy Considerations for the Northern Great Plains, Economic Aspects of Geothermal Energy, Supply/Demand Scenarios for Offshore Nuclear Power Plants and the Atlantic Outer Continental Shelf, Bituminous Coal and Lignite Shipments from Coal Producing Districts by Ranges of Sulfur Content, and Potential Market Availability and Economics of Supplemental Sources of Gaseous Fuels. Support of the Secretariat and other Government agencies was commonplace through briefings, summaries of positions, special reports and reviews. Monthly estimates on natural gas production and imports were provided to the Office of Energy Data and Analysis for their Monthly Energy Indicators Report. A special report, prepared under the direction of the Council of Environmental Quality, dealt with the effects that restrictions on surface mining of coal would have on recovery of coal reserves and present coal production. Concurrent with these efforts and anticipating even more requests for data because of the energy crisis the fossil fuel data bank was continually expanded.

An assessment of the Impact of Air Quality Requirements on Coal 1975, 1977, and 1980 was prepared to determine present and projected coal demand and supply through 1980 for the EPA Air Quality Control Regions. About half of the anticipated coal available in 1975 would not meet air quality standards established or proposed for coal in 1975 State Implementation Plans.

5. Engineering, Evaluation, and Demonstration: Fiscal year 1974, $8,992,000; fiscal year 1975, $7,731,000; decrease, $1,261,000. The decrease consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$ - 996,000	--	--	--	Reduction in Mined Land Investigations and Demonstration Program.
(2)	-700,000	--	--	--	Research on filling critical mine void areas, Rock Springs, Wyoming.
(3)	+ 47,000	--	--	--	Annualization of pay increase granted in FY 1974 (E.O. 11789).
(4)	+ 388,000	--	--	--	Reimbursement for space provided by GSA in accordance with P.L. 92-313.
	-1,261,000	--			

PROGRAM STATEMENT

The Bureau's engineering, evaluation, and demonstration programs are designed to help assure the quality of the environment in mining and mineral areas that out of necessity must experience greater utilization and development of their natural resources.

The Bureau monitors and assesses the environmental impact of programs and projects of the Federal Government oriented to mining, mineral processing, and related resource areas as provided for under the National Environmental Policy Act of 1969.

Technical and economic information is provided to help resolve environmental problems associated with past mining practices, for example, mine subsidence, surface-mined land disturbance, underground and outcrop mine fires, waste banks, mine water control, etc.

The Bureau administers and carries out certain projects specifically authorized by Congress--P.L. 82-738, the Mine Fire Control Act; P.L. 84-162, the Mine Drainage Control Act; and P.L. 84-181, an amendment to P.L. 84-162, providing for public health and safety mine sealing projects; and Section 205 (Mining Area Restoration) of P.L. 89-4, the Appalachian Regional Development Act, as amended by P.L. 90-103, P.L. 91-123, and P.L. 92-65.

While maintaining its position in the worldwide competition for minerals, the United States also must direct its energies toward eliminating the adverse environmental effects associated with mining, resolving through legislative or other appropriate action current problems associated with mining, and assuring that future resource needs can be met with as little environmental damage as possible.

PROGRAM OF WORK

Engineering and Environmental Investigations: $2,340,000

Field investigations are undertaken to fully develop a clear, complete and reliable set of information for use in averting or resolving mineral and energy problems. Current emphasis is upon mineral related environmental issues--responding to growing public awareness of environmental damage which has stimulated governmental actions such as those to find low-sulfur fuel supplies and alternative sources of energy and to cope with subsidence problems.

Because of the critical domestic energy supply situation, emphasis is placed on the availability and costs of producing petroleum in different geographical areas, evaluations of domestic petroleum production capacity, and the availability of petroleum supplies from offshore areas. In field investigations on coal, emphasis is given to the impact of environmental controls on supply and demand. Included are studies on the availability of low-sulfur coals to meet air pollution requirements, the availability of coal including information essential to the determination of land reclamation policies.

Mine maps will continue to be gathered and developed into a repository which includes data on past and current mine operations. Maps will be microfilmed and the systematic indexing-data-retrieval system will be continuously expanded to assure maximum utility of the repository. Emphasis on areas of adverse environmental impact (present or anticipated) will continue and such information will include, but not be limited to, mine surface and underground mine waste disposal areas, assay plans, geology, and other data pertinent to the efficacy of the information-data system.

Microfilming of mines and mineral processing reports for the continued assessment of the technology of mineral extraction, byproduct--coproduct relationships, environmental considerations, alternate materials, etc., will continue.

Concern over the effects of mining on the environment highlights the need for reliable and essential information on land use before, during, and after mining. Studies to determine the effects on and the needs for surface and underground mined lands will continue so that a firm basis may be available for establishing adequate restoration and protection guidelines, principles, and programs.

Programs will continue on clay testing; investigations on the effect of mining to surface streams; subsidence potentials of mine areas; and investigations on simultaneous surface mining/reclamation methods. The development of guidelines and criteria for mining and environmental quality will be looked into with consideration given to the unique physical conditions extant in different mining areas, with different mined commodities,etc.

Examination, sampling, and appraisal of wastes at current and past domestic mine sites and powerplants will continue with a view to determining optimum methods and costs for safe disposal or utilization of the wastes and to establish an inventory of the qualitative and quantitative characteristics of the waste.

Mineral surveys of certain Alaska Native Land Claims will be made in cooperation with Interior and other Federal agencies and the State of Alaska to aid in the selection and disposition of land. Feasibility studies of technological and economic problems inherent in the development of Alaskan deposits will continue to be investigated. Identification of oil seeps will be continued and the flow from major seeps monitored to determine characteristics of the oil and the environmental impact of the seeps will be determined.

The Bureau will continue to carry out its responsibilities under the National Environmental Policy Act of 1969 in applying its special expertise to the review of environmental impact statements on the air quality implications of energy development, mining and mineral land decisions, solid waste and recycling enterprises, and public works activities that involve potential mineral land or general mineral resource conflicts.

Mined Land Investigations and Demonstration--Anthracite Area: $3,770,000 (decrease, $996,000)

Mine maps will continue to be gathered and developed into the anthracite repository which includes data on past and current mining operations. Maps will be microfilmed and the systematic indexing--data retrieval system expanded to assure maximum utility of the repository. Emphasis on selected areas of particularly adverse environmental impact (present or anticipated) will continue. Information gathered will include, but not be limited to, abandoned underground mine waste disposal areas, geology, and other pertinent data.

Research and demonstration studies and field work projects will continue which are directed to (1) the development of systems and techniques for solving mine area problems resulting from past mining, and (2) the prevention of similar problems in current and future mining. Specifically, efforts will be directed toward mine subsidence prevention and control through expanded use of the relatively new single-borehole injection system. Investigations will be made into its employment under a wider variety of underground conditions and its utilization of both coarser-sized and burned coal mine refuse as flushing materials. The application of this technique to the control of certain underground mine/outcrop fires will be examined.

Methods will be expanded for stabilizing coal mine waste banks through vegetative growth. New techniques for the extinguishment of burning coal mine refuse banks will be looked into. Ways of utilizing or removing nonburning banks--which are aesthetically displeasing, a source of acid waste, and have potential for becoming air pollution sources if ignited--will be investigated.

Research into the sealing of strip mine pits to preclude the generation of acid water will be carried out. Similarly, studies will be made of techniques for preventing the outbreak of underground and outcrop mine fires, including the development or use of materials that can seal mine outcrops against possible ignition from natural causes.

Demonstration projects will be pursued to collect sufficient reclamation data to prove the feasibility of creating recreational areas from strip mined sites in public ownership. Specific parklands will be created as tangible proof of this.

Infrared and other air-borne thermal scanning for mine fires and burning mine waste banks will be extended. The monitoring of water levels and conditions in abandoned underground mine workings to identify harmful water build-ups and discharges will be continued. Under the Mine Drainage Control Act, additional phases of a long-range project for establishing a comprehensive network of permanent mine-water pool monitoring stations throughout the anthracite region will be instituted jointly by the Bureau and the Commonwealth of Pennsylvania.

A major study is to be initiated into the feasibility of applying very large scale surface mining technology with concurrent reclamation to appropriate deposits of strippable low-sulfur anthracite.

Publications dealing with all aspects of the engineering, evaluation and demonstration activity will be issued, including special interest areas such as hazards to the general public remaining in abandoned mined areas.

Filling Mine Void Areas at Rock Springs, Wyoming: $0 (decrease, $700,000)

This program called for the extension of an ongoing project in Rock Springs, Wyoming, for testing of the pumped slurry injection process of backfilling mine voids with sand. A small-scale demonstration project has been carried out which showed the general feasibility of the process. Work is also underway at Rock Springs on a medium-scale demonstration project to further test the use of the pumped slurry injection process with sand under a wider range of subsurface conditions. The most subsidence prone areas of the city are being backfilled under the present program, and a monitoring system established to detect further subsidence. Sufficient information is expected to be developed from the work already financed so that full-scale application could be undertaken wherever projects are authorized.

Control of Fires in Coal Deposits: $236,000

A continuing responsibility of the Bureau under the Mine Fire Control Act of 1954, P.L. 83-738, is the administration and conduct of projects directed to the extinguishment of underground and outcrop coal mine fires on public lands, Indian lands, and on private property. In the latter case, projects are jointly financed on a 50/50 basis with a local cooperating political entity or private property owner. On public and Indian-owned lands, where the greater number of fires occur, control costs are defrayed 100 percent by the Bureau.

Work plans for fiscal year 1975 anticipate the control of fires on Federal lands in Arizona, Colorado, Montana, Utah, and Wyoming.

Wilderness Mineral Surveys: $1,095,000

Pursuant to the Wilderness Act of 1964, the Bureau of Mines with the Geological Survey is responsible for making mineral surveys in 54 wilderness areas taken directly into the National Wilderness Preservation System, 34 primitive areas being reviewed for suitability, and other Forest Service lands being considered for inclusion. Emphasis to date has been to complete the mineral surveys in the primitive areas in time for the Forest Service to hold to the 10-year review deadline as provided in the Act. Mineral surveys in the wilderness areas began in fiscal year 1970 and will continue on schedule in fiscal year 1974.

Studies are planned for such areas as the Minarets Wilderness, California; West Elk Additions, Colorado; Absaroka Primitive and additions areas and the Bob Marshall Wilderness, Montana; Lone Peak Study area, Utah; and the Teton Wilderness, Wyoming. New areas will not be known until priorities have been established by the Forest Service.

River Basin Studies: $290,000

The Missouri River Basin program stems from establishment in 1945 of the Missouri River Basin Inter-Agency Committee (now Missouri River Basin Commission). The primary objective of the program is to develop the water and related land resources to insure their best use to meet the needs of the basin's population and indirectly those of the Nation. Under this program, the Bureau has conducted and will continue to conduct many mineral or mineral economic related studies of sub-basins, of Indian reservations, of waterflooding oil- and gasfields, and of coal resources by States. A study of the water requirements of the petroleum industry associated with secondary recovery by waterflooding in North Dakota will complete a series of studies that included Montana, Wyoming, Nebraska, and Colorado.

Studies on the coal and lignite resources of the area will be conducted to determine availability of coal lands for strip mining; commitments of reserves

to thermal power, synthetic fuels production, and coal chemicals; alternative modes and costs for transporting such coal; and the environmental impacts of mining and processing the coal and techniques for alleviating them. The problem of competing land uses as a handicap to mineral resource development will be particularly addressed.

At the designation of the White House, the Interior Department was named as the lead agency for the Northern Great Plains Resource Study. The purpose of the study is to assemble basic data and alternative recommendations regarding the development of the area. In FY 1975, the joint Federal-State study program for the Northern Great Plains will evaluate the resources of the area.

In cooperation with the Federal Water Pollution Control Administration, the Bureau of Outdoor Recreation, the Bureau of Sport Fisheries and Wildlife, and the Corps of Engineers, the Bureau of Mines will serve as mineral engineering consultant on studies of water-related mineral resources, their water requirements, and water pollution problems. This role results from the increased emphasis on the quality of our environment expressed in the passage of numerous laws that affect water-related activities of the mineral industry. Participation occurs in reviewing agency plans and in two types of River Basin Framework studies known as type 1 and type 2 studies.

Type 1 studies concern regions coordinated by a river basin commission or other Federal interagency-State coordinating organizations. The long run economic projections of economic development are translated into demands for water and related land resources uses, hydrologic projections of water availability, both as to quantity and quality, and projections of related land resource availability. These characteristics are used to outline projected water and related land resource problems and the general approaches that appear appropriate for their solution.

Type 2 studies survey the feasibility of development for individual river basins, tributary basins, or subregions. They are undertaken for areas with complex problems needing concerted multiagency actions, Federal and non-Federal, for their solution to develop a water related land resources plan to meet needs to 2020. These studies also define and evaluate alternatives in sufficient detail to base authorization or implementation of those projects that should be initiated in the next 10 to 15 years to satisfy needs.

Mineral examinations are made of proposed reservoir sites for construction agencies to determine if the proposed construction would have an adverse effect on any mineral resources, and reports are submitted to the appropriate agencies. Water related mineral resource studies in the project areas of the Garrison Diversion Unit, North Dakota; Madison River Basin, Montana; the Multipurpose Reservoirs, South Dakota; and the Minneapolis-St. Paul Region, Minnesota; in the central and western States plus the Long Island and New England Study areas in the eastern States will be conducted.

Final reports of the Corps of Engineers, Soil Conservation Service and Federal Power Commission are reviewed to determine if the mineral potential of an area would be adversely affected by proposed construction, and memorandum report is submitted to the Secretary's office. Final reports of the Bureau of Reclamation are similarly reviewed, but the memorandum report is submitted by the Director to the Commissioner, Bureau of Reclamation.

In FY 1975, work in these areas will continue in cooperation with other agencies.

PROGRAM SUPPORT ACTIVITIES FUNDED BY TRANSFER FROM APPALACHIAN REGIONAL COMMISSION

Pursuant to Section 205, P.L. 89-4, as amended, the Bureau will continue to engineer, manage, and administer mining area restoration projects approved by the Appalachian Commission. Specifically, the Commission will supply funding to the Bureau for contracts, grants to the States in the Region, and related costs for the conduct of public works type projects for the control of underground mine fires, the prevention of mine subsidence, the reclamation of publicly-owned surface mined lands, the removal of nonburning and the extinguishment of burning coal mine waste banks, the sealing of abandoned oil and gas wells, and such other programs and projects that the Commission may deem appropriate under the auspices of Section 205.

EXAMPLES OF RECENT ACCOMPLISHMENTS

The second, intermediate phase of a demonstration project to reclaim a 126-acre tract of mined land in Lackawanna County, Pennsylvania, for future recreational use was concluded. Completed contract work included temporary repair of the existing bed of a stream running through the project area, the construction of a fish pond, the reopening of the entrance to an abandoned underground mine, topsoiling, grass seeding and tree planting. During the third and final phase of the project, also largely completed, the bed of the stream has been permanently relined with a sealing agent, a trail system developed, and additional vegetation provided. The completed site is to be developed by State and local authorities as a park and may eventually contain a mining museum.

Significant progress was made during the year in broadening the applicability of the recently developed pumped slurry injection process of backfilling abandoned underground mines for subsidence control. Because slurry injected through a single borehole can fill extensive areas of mine workings from floor to roof, the new process appears clearly superior to previous techniques of backfilling old mines into which men cannot go to guide or control filling operations. In the Green Ridge area of Scranton, Pennsylvania, the final phase of a large-scale demonstration project testing the new technology was essentially completed. Under specific investigation in this second phase was whether an even larger size of crushed coal refuse could be used with this process than the minus ¼-inch or ½-inch sizes previously attempted. Testing indicated that refuse crushed to minus 5/8-inch size could be used. Because the expense of crushing is a major cost component of any underground backfilling operation using coal refuse, the way has been cleared for more economic application of the new injection process. An additional result of this phase of the project was the removal from the surface of approximately 500,000 cubic yards of coal refuse. Clearance of this material, long a source of air and water pollution and a potential fire hazard, released 18 acres of previously occupied land for future use. Support was provided as well for 35 acres of land where surface subsidence was threatening a densely populated residential community.

At Rock Springs, Wyoming, the first two stages of a long-range project to test the applicability of the new process under a wide range of underground conditions were completed. During the overall project, sand is to be injected into abandoned mine workings underlying 200 acres of the city where subsidence is expected to occur unless remedial action is taken. Among the problems under investigation are the distance that the sand slurry can move through interconnected mine workings while still completely filling the voids, the extent to which the spread of the fill material can be controlled from the surface and kept from moving into underground areas where it is not needed, and the reaction and movements of the sand slurry when placed in tilted beds. The question of how late in the process of mine collapse and surface subsidence

fill material can be injected and still accomplish a useful purpose is also being studied. In the first two stages, approximately 300,000 cubic yards of sand were injected in mined-out beds beneath 60 acres of land in 5 areas of the city where the threat of subsidence was considered most critical.

In the Minooka area of Scranton, an investigation was initiated by the State of Pennsylvania under a Bureau of Mines grant to see how effectively the pumped slurry injection process could be used to force material into old mine workings that are all above the water level and already partially caved in. The immediate objective of the project was to insert 225,000 cubic yards of material into five collapsing mine beds, some of which lie quite close to the surface, underlying 17 acres of heavily built-up land. If sufficient material eventually can be forced into these beds to furnish needed support and halt additional subsidence, the new technology will have been shown to be available for use under a set of subsurface conditions where there is now no other effective means of stabilization.

The pumped slurry injection process was being tested in Lackawanna County, Pennsylvania, for its potential in combating another problem associated with abandoned underground mines--uncontrolled fires. To smother a recently-discovered mine fire, the first of an estimated one-half million cubic yards of burned coal refuse was being crushed and inserted into an old collapsed mine working. Unchecked, the fire was threatening to spread through the coal beds to the nearby construction site of a proposed new six million dollar high school.

In accordance with Section 205 (Mining Area Restoration) of the Appalachian Regional Development Act, as amended, the Bureau of Mines continued to engineer, manage, and administer work-action projects for the resolution of environmental problems associated with the past mining of anthracite and other minerals. Since implementation of this Act in 1965, the Bureau has acted in cooperation with the Appalachian Regional Commission to complete 55 restoration projects. Included in this total have been 33 mine fire control projects, 8 subsidence control projects, 8 surface mine reclamation projects, 5 oil and gas well sealing projects, and 1 mine refuse bank reclamation project.

Four fires were brought under control in Colorado and Utah, one in cooperation with a petroleum company which owned the affected land. In addition, technical advice was extended to a landowner in Wyoming in combating a fire in a deposit on his property.

Mine maps continued to be collected, researched, microfilmed, and made part of a computerized file system. Maps of Eastern bituminous coal mines permanently closed or abandoned, submitted to the Health and Safety district offices in compliance with Section 312(c) of Public Law 91-173, were processed on a continuous basis and made a part of the mine map repository. About 18,000 mine maps have been placed in the repository. The importance of this service is emphasized by the large number of inquiries by telephone and personal visits. The maps have been used most frequently by homeowners, prospective real estate buyers, real estate developers, building contractors, and planning organizations.

Oil seeps along the north coast of Cook Inlet, Shelikof Strait, and the Gulf of Alaska coast between the Copper River and Yakutat Bay have been located, sampled, and photographed. The report and documentary film will help distinguish between manmade spills and natural seeps.

Continued field exploration of the Northwest Alaska coal deposits alternating with laboratory studies, economic analyses, and university research is gradually producing a reliable body of data on these extensive deposits. Coking coal seems to occur where the coalbeds have been subject to folding.

Cooperative State Investigations were conducted with State Geological Surveys to evaluate mineral deposits. These investigations led to the development of deposits of clay (for brick), shale (for lighweight aggregate), limestone (for crushed stone), greensand (for water treatment), and connate water (for recoverable minerals). In addition, comprehensive coal investigations were in process with Alabama and West Virginia agencies to determine the coal quality and appraise their remaining reserves. The strippable coal resources of Colorado were also evaluated.

The Bureau helped prepare an Environmental Impact Statement and a Decision Option Document on a proposal to mine phosphate rock from the Los Padres National Forest. In addition, hundreds of environmental impact statements were reviewed. Assistance to other Federal, State, and local agencies on mineral matters continued in water resources and river basin studies, wild and scenic river studies, land use planning and resource development. Investigations of areas affected by the Wilderness Act of 1964 continued.

Reserves of petroleum in Montana, recoverable by the secondary recovery technique of water flooding, were evaluated as a companion study to similar studies for Wyoming and Nebraska. Water requirements for the technique were also analyzed and reported.

Reports were published on the economic availability of byproduct fluorine, on methods and costs of coal refuse disposal and reclamation, on transportation costs of supplying domestic coal and foreign residual fuel oil to selected U.S. markets, and on the potential generation and disposal of solid waste resulting from the operation of electric utility stack gas desulfurization systems.

6. Program Administration: Fiscal year 1974, $1,391,000; fiscal year 1975, $1,517,000; increase, $126,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	+ $ 28,000	--	$330,000	--	To reimburse the Employee Compensation Fund.
(2)	+ 18,000	--	--	--	Annualization of increased pay costs granted in fiscal year 1974 (E.O. 11789, October 1973).
(3)	+ 80,000	--	80,000	--	Reimbursement for space, services, and facilities provided by GSA in accordance with P.L. 92-313.
	+ $126,000	--			

NEED FOR INCREASE

(1) Employee Compensation Payments, $28,000: The increase of $28,000 is due, in part, to the higher salary levels which form the basis for compensation, cost-of-living increases, and the increased cost for medical care. In addition, new claims for compensation and long-term disability and death cases have increased.

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(2) Annualization of increased pay costs, $18,000: These funds will provide for annualization of increased pay costs granted in fiscal year 1974, pursuant to E.O. 11789, October 1973.

(3) Reimbursement for space, services, and facilities provided by GSA, $80,000: These funds will provide reimbursement for space, services, and facilities provided by GSA in accordance with Public Law 92-313.

PROGRAM STATEMENT

1. General Administration

The amount of $1,187,000 provides for executive direction and part of the administrative services for the Bureau of Mines. The balance of the cost for administrative services is charged to program funds appropriated directly or transferred from the Department of Defense; Atomic Energy Commission; Department of Health, Education, and Welfare; or other agencies.

The Office of the Director provides executive direction in conducting programs designed to conserve and develop mineral resources and to promote healthful working conditions in the mineral industries.

The general administrative functions include the development, presentation, and execution of budgets; planning, coordinating, and evaluating the Bureau's financial management program; maintaining payroll, retirement, and leave records; maintaining accounts for control of funds and recording assets, liabilities, and income and expenses; preparing financial reports; recruiting, training, placing, classifying, and servicing employees; management of ADP systems and programs; organization and staffing management; files, mail, and communication services; contracting for supplies, equipment, construction, research and development, grants and other services; and recording, utilization, maintenance, and disposal of Government property.

Costs of general administration are met from the Program Administration activity, assessments on other activities, and charges assessed to the Helium Fund and contributed, transfer, and working funds. A breakdown of the source of funding is as follows:

	Amount Available FY 1974	Amount Available FY 1975	Increase (+) or Decrease (-)
Direct Administrative Funding	$1,089,000	$1,187,000	+ $ 98,000
Other Administrative Funding			
Energy Research	475,000	1,073,000	+ 598,000
Metallurgy Research	318,000	380,000	+ 62,000
Mining Research	855,000	1,370,000	+ 515,000
Data Collection, and Analysis	222,000	247,000	+ 25,000
Engineering, Evaluation, and Demonstration	175,000	156,000	- 19,000
Helium Fund	61,000	61,000	--
Contributed, Transfer, and Working Fund	243,000	200,000	- 43,000
Total	$3,438,000	$4,674,000	+ $1,236,000

The increase of $1,236,000 provides $236,000 for leased space and annualization of the increased pay costs and $1,000,000 for program increases. The $1,000,000 is needed to provide additional administrative services for the accelerated energy program proposed for fiscal year 1975. This includes contracting, personnel, financing, auditing, and other administrative services.

2. Employee Compensation Payments

The amount of $330,000 provides funds to reimburse the Bureau of Employee Compensation, Department of Labor, for payments made because of injury or death of employees under the jurisdiction of the Bureau of Mines, as required by Section 209, Public Law 86-767.

PERSONNEL SUMMARY

	Actual 1973	Estimate 1974	Estimate 1975
Total number of permanent positions	3,152	3,175	3,466
Full-time equivalent of other positions	166	208	208
Average paid employment	3,191	3,307	3,552
Average GS grade	9.1	9.1	9.1
Average GS salary	$15,231	$15,233	$15,377
Average salary of ungraded positions	$10,394	$10,914	$11,460

ITEMIZATION OF ESTIMATE
(in thousands of dollars)

Department of the Interior
Appropriation Title: Mines and Minerals

Bureau of Mines

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) or Decrease (-)
Program and Financing				
Total direct obligations	$91,921	$106,117	$212,347	+ $106,230
Unobligated balance, start of year	--	- 511	--	+ 511
Unobligated balance, end of year	511	--	--	--
Unobligated balance, lapsing	396	--	--	--
Budget authority	92,827	105,606	212,347	+ 106,741
Budget authority				
Appropriation	92,842	101,400	212,347	+ 110,947
Transferred to other accounts	- 37	--	--	--
Transferred from other accounts	22	--	--	--
Appropriation (adjusted)	92,827	101,400	212,347	+ 110,947
Proposed supplemental for wageboard increases	--	215	--	- 215
Proposed supplemental for pay act increases	--	3,991	--	- 3,991

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) or Decrease (-)
Direct Obligations by Objects:				
11 Personnel compensation	$42,383	$ 49,618	$ 54,872	+ $ 5,254
12 Personnel benefits	3,669	4,219	4,580	+ 361
13 Benefits for former personnel	18	--	--	--
21 Travel and transportation of persons	1,274	1,583	1,897	+ 314
22 Transportation of things	304	378	458	+ 80
23 Rent, communications, and utilities	2,158	2,671	5,351	+ 2,680
24 Printing and reproduction	523	641	691	+ 50
25 Other services	26,629	28,554	121,105	+ 92,551
26 Supplies and materials	2,881	3,561	5,374	+ 1,813
31 Equipment	4,971	6,142	9,269	+ 3,127
32 Lands and structures	5,126	6,310	6,310	--
41 Grants, subsidies, and contributions	1,985	2,440	2,440	--
Total direct obligations	$91,921	$106,117	$212,347	+ $106,230

BUREAU OF MINES

Explanation of Administrative Provisions

Contributions. Various industrial organizations have expressed interest in many phases of the Bureau's activities and are at times willing to contribute funds, experienced personnel, special equipment, etc. toward accomplishing certain objectives useful to industrial purposes. The Bureau endeavors to cooperate with industry whenever possible and authorization to accept such contributions is a distinct aid in furthering such cooperation.

Sale of metals and mineral products. In some of the metallurgical pilot plants of the Bureau, quantities of special metals may be manufactured which might be of value to industrial concerns. Funds received from the sale of such products would be covered into miscellaneous receipts.

HELIUM FUND

(in thousands of dollars)

Estimated Income, 1974:	
Operations	$ 7,217
Estimated Income, 1975:	
Operations	7,534

Financial Summary

	Actual 1973	Estimate 1974	Estimate 1975
Income and Expenses (funded):			
Income:			
Sales of helium	$ 6,274	$ 5,950	$ 6,230
Other income	1,528	1,267	1,304
Total Income	7,802	7,217	7,534
Expenses:			
Production and sales	2,916	1,661	1,919
Administrative and other expenses	528	602	598
Total Expense	3,444	2,263	2,517
Net Income (funded)	4,358	4,954	5,017
Unobligated Balance, Start of Year	5,706	7,715	7,673
Contract Authority	36,323	--	--
Change in Selected Resources	- 116	--	--
Total Funds Available	46,271	12,669	12,690
Capital Outlay:			
Crude helium for underground storage	38,512	4,014	4,004
Land, structures, and equipment	44	982	1,072
Total Capital Outlay	38,556	4,996	5,076
Unobligated Balance, End of Year	7,715	7,673	7,614

Helium Fund: Fiscal year 1974, none; fiscal year 1975, none.[1/]

On January 26, 1971, the Under Secretary of the Interior issued a determination to terminate the four helium conservation contracts. Thereafter, the United States District Court in Kansas enjoined the Government from taking any action leading to the termination of three of the contracts on the ground that the requirements of the National Environmental Policy Act had not been met. Pursuant to that ruling, the Bureau of Mines prepared and disseminated a final environmental statement. On January 12, 1973, the Court issued an oral ruling denying the Government's motion to dissolve the injunction, but interpreted the injunction as allowing the Secretary to proceed anew to determine whether or not to terminate the three conservation contracts. The Secretary of the Interior issued termination notices on February 2, 1973, effective April 4, 1973. Thereafter, the Government again moved to dissolve the injunction. On March 14, 1973, the District Court denied the motion. The Government appealed, and on October 19, 1973, the Court of Appeals for the Tenth Circuit reversed the judgment of the District Court and remanded the cause with directions to dismiss the action. On November 12, 1973, the Government ceased accepting helium for purchase from the three companies. The companies have notified the Government of their position that the contracts have not been validly terminated by the Government and that Breach of Contract suits may be filed.[1/] The matter of damages owing a fourth contractor is in litigation in the Court of Claims. No helium is being received from the four original contractors.

Under authority of the Helium Act Amendments of 1960 (P.L. 86-777), the Bureau of Mines will continue helium production and sales during 1974 from its production plant at Keyes, Oklahoma. Shipments of helium in small cylinders will continue from the Bureau's Amarillo, Texas, shipping terminal. All shipments of helium in trailers and tank cars will be from the Keyes plant. Helium produced by the plant in excess of market requirements will be added to underground storage. The Exell, Texas, plant will operate to accommodate helium storage operations.

Total helium production by the Bureau of Mines during FY 1974 is expected to be about 386 million cubic feet. Sales for FY 1974 are estimated to be 170 million cubic feet.

As of June 30, 1973, the Government had $487.3 million invested in the helium program. Of this amount, $369.3 million is owed to the U.S. Treasury in accordance with the Helium Act, leaving a net investment of $118.0 million. The investment at June 30, 1973, was about seven percent in helium plants and facilities and about 93 percent in helium stored underground.

On June 30, 1975, the Government's investment is estimated to be $541.9 million, of which $419.6 million will be owed to the U.S. Treasury, leaving a net investment balance of $122.3 million. The estimated increase from June 30, 1973, of $4.3 million in net Government investment (equity) results from an increase in retained earnings accrued during fiscal years 1974 and 1975.

1/ Because of the legal determinations involved, no appropriation (borrowing authority) to the Helium Fund is being requested at this time to permit the liquidation of obligations that may or may not have been legally incurred under the three contracts subsequent to March 28, 1971. However, legal actions and court rulings could affect this decision at any time.

OBLIGATIONS INCURRED BY THE BUREAU OF MINES BY ACTIVITY
AND SOURCE OF FUNDS, FISCAL YEARS 1973, 1974, AND 1975

	1973	1974	1975
ENERGY:			
Bureau of Mines Appropriation	$19,231,614	$24,322,000	$81,108,000
Reimbursements	50,356	50,000	50,000
Department of the Army	158,581	150,000	150,000
Department of the Air Force	216,281	200,000	200,000
Department of the Interior	857,666	350,000	350,000
Department of Justice	9,197	10,000	10,000
Department of the Navy	89,941	100,000	100,000
Department of Transportation	159,462	100,000	100,000
Atomic Energy Commission	24,000	20,000	20,000
Environmental Protection Agency	800,739	800,000	800,000
General Services Administration	2,340	5,000	5,000
Veterans Administration	59,502	50,000	50,000
Contributed Funds	301,977	325,000	325,000
Total	$21,961,656	$26,482,000	$83,268,000
METALLURGY:			
Bureau of Mines Appropriation	$15,366,555	$16,272,000	$19,898,000
Reimbursements	56,570	60,000	60,000
Department of the Air Force	62,760	70,000	70,000
Atomic Energy Commission	75,000	50,000	50,000
Contributed Funds	87,423	150,000	150,000
Total	$15,648,308	$16,602,000	$20,228,000

	1973	1974	1975
MINING:			
Bureau of Mines Appropriation	$36,779,114	$43,783,000	$89,750,000
Reimbursements	265	--	--
Department of the Air Force	5,257	50,000	50,000
Department of the Army	549,971	2,340,000	2,340,000
Department of the Interior	32,874	50,000	50,000
Atomic Energy Commission	31,146	35,000	35,000
National Aeronautics & Space Administration	65,021	100,000	100,000
National Science Foundation	125,000	125,000	125,000
Contributed Funds	773	20,000	20,000
Total	$37,589,421	$46,503,000	$92,470,000
DATA COLLECTION AND ANALYSIS:			
Bureau of Mines Appropriation	$9,482,028	$11,357,000	$12,343,000
Reimbursements	166,862	170,000	170,000
Department of the Interior	185,448	50,000	50,000
Contributed Funds	943	5,000	5,000
Total	$9,835,281	$11,582,000	$12,568,000
ENGINEERING, EVALUATION, AND DEMONSTRATION:			
Bureau of Mines Appropriation	$ 9,835,972	$ 8,992,000	$ 7,731,000
Department of the Air Force	14,562	40,000	40,000
Department of State	6,900	10,000	10,000
Atomic Energy Commission	33,990	--	--
Office of Emergency Preparedness	10,387	50,000	50,000
Appalachian Regional Commission	10,905,000	9,325,000	9,325,000
Contributed Funds	6,267	800,000	300,000
Total	$20,813,078	$19,217,000	$17,456,000

	1973	1974	1975
PROGRAM ADMINISTRATION:			
Bureau of Mines Appropriation	$1,224,920	$1,391,000	$1,517,000
Reimbursements	9,902	20,000	20,000
Department of the Interior	223,340	230,000	230,000
Contributed Funds	230	--	--
Total	$1,458,392	$1,641,000	$1,767,000
DRAINAGE OF ANTHRACITE MINES:			
Bureau of Mines Appropriation	$125,026	$200,000	$200,000
HELIUM PRODUCTION:			
Federal and Non-Federal Sources	$42,115,965	$7,259,000	$7,593,000
SUMMARY:			
Bureau of Mines Appropriation	$92,045,229	$106,317,000	$212,547,000
Reimbursements	283,955	300,000	300,000
Other Agencies	14,704,365	14,310,000	14,310,000
Contributed Funds	397,613	1,300,000	800,000
Helium Production	42,115,965	7,259,000	7,593,000
Total	$149,547,127	$129,486,000	$235,550,000

DEPARTMENT OF THE INTERIOR

MINING ENFORCEMENT AND SAFETY ADMINISTRATION

Highlight and Summary Statement

The Mining Enforcement and Safety Administration (MESA) was established May 7, 1973, by Secretarial Order No. 2953. The functions of the Administration are carried out under the authority of the Federal Metal and Nonmetallic Mine Safety Act of 1966 (80 Stat. 772; 30 U.S.C. 721 note), and the Federal Coal Mine Health and Safety Act of 1969 (83 Stat. 742; 30 U.S.C. 801 note), that deal with the inspection of domestic mines and enforcement of health and safety standards.

Programs are conducted to control health hazards and to reduce fatalities and injuries in the mineral industries. This is accomplished through mine inspections, field investigations, safety education, training and motivation, health studies, and devising and enforcing appropriate health and safety standards.

The fiscal year 1975 budget request for MESA is $68,146,000. After adjusting for increased costs because of Federal pay increases, the net increase is $8,433,000 above the amount available for fiscal year 1974. The request is divided into five program activities as follows:

	1974	1975	Net Change
Coal mine health and safety inspections	$35,663,000	$40,863,000	$+5,200,000
Metal and nonmetal mine health and safety inspections	8,009,000	10,739,000	+2,730,000
Education and Training	7,064,000	5,884,000	-1,180,000
Technical Support	7,588,000	9,144,000	+1,556,000
Program Administration	1,389,000	1,516,000	+ 127,000
Total	$59,713,000	$68,146,000	$+8,433,000

Program Changes

Increases totaling $9,933,000 are offset by a decrease of $1,500,000, for a net increase of $8,433,000. The increase includes $2,563,000 to reimburse the General Services Administration for rental of space; $787,000 to annualize pay increase costs granted in FY 1974; $28,000 to reimburse the employee compensation fund for payments made because of injury or death of employees; and $6,555,000 for program functions described below.

The $1,500,000 decrease mentioned above reflects the amount that was appropriated in FY 1974 to complete the construction of a Federal Health and Safety Academy.

Coal Mine Health and Safety Inspections - $40,863,000: The major objective of this program is to provide the safest possible working environment for the Nation's coal miners. Funds are utilized to conduct health and safety inspections of all coal mines, both surface and underground, and to enforce the provisions of the Coal Mine Health and Safety Act of 1969. In 1973, over 85,000 inspections, investigations, and surveys were made as compared to 65,000 during 1972. These inspections resulted in 72,000 Notices of Violations issued during 1973 compared to 76,000 during 1972. Though not subject to definite proof, the drop in fatalities in the mines from 156 in 1972 to 132 in 1973 is attributed to the increased presence of inspectors in the mines. In addition, the respirable dust levels in underground mines have continued to decrease since the revised standard of two milligrams per cubic meter dust level in mine atmospheres became effective on January 1, 1973.

A program increase of $3,220,000 is requested to further intensify the inspection program. In the Supplemental Appropriation Act for 1974, an additional $1,870,000 was appropriated for assessing civil penalties for violations as required under the Act. Specifically, the additional funds provided for the last six months of fiscal year 1974, for an increased work force of 263 people to assess civil penalties and for additional coal mine inspection personnel related to assessment operations. An increase of $1,930,000 is requested in fiscal year 1975 for continuation of this program on a full-year basis. The balance of the increase is requested to annualize increases previously granted.

Metal and Nonmetal Mine Health and Safety Inspections - $10,739,000: The major objective of this program is to reduce the risks to the safety and health of workers in the Nation's 13,000 metal and nonmetal mines which are complicated by the diversity of the operations and by the complex character of many underground diggings. These mines, quarries, and sand and gravel pits, and the mills serving them, are located in all 50 States, and employ more than 200,000 workers. They produce more than 80 different mineral commodities, ranging from asbestos to zinc.

The Federal Metal and Nonmetallic Mine Safety Act directs the Secretary of the Interior to develop and promulgate safety and health standards and to enforce the standards in order to protect these mine workers from occupational illness and accidental injury and death.

Development of Health and Safety standards is closely coordinated with their enforcement utilizing the advice and guidance of persons actively engaged in mining operations and mine inspectors engaged in enforcement supplemented by staff experts in all phases of mining.

Perhaps the most significant accomplishment in 1973 has been the reduction of fatal injuries in underground mines. In 1972, there were 234 fatalities compared to 165 during the first 11½ months of 1973. Although the number of fatalities in underground mines has been held down, it is greatly disturbing to note that the trend in surface operations has been upward. Metal and nonmetal open pits, crushed stone, quarries, and sand and gravel pits, have all experienced more fatalities in 1973 than in 1972. These figures probably reflect the special attention paid to underground mines, because those mines are inherently more hazardous than surface mines. But the statistics show quite clearly a need to increase the frequency of inspections of surface operations. The additions to the inspection staff requested in the present budget should enable MESA to move in this direction.

An increase of $2,100,000 is requested for continued implementation of the Act of which $1,100,000 is requested to employ an additional 75 mine inspectors. The added inspectors will bring the inspection force up to 300 and assist in achieving the program goal of inspecting each underground mine four times a year; each open pit metal mine two times a year; and each sand and gravel, crushed stone, and open pit nonmetal mine once a year. The requested appropriation would provide for the necessary spot and follow up inspections to ensure compliance with citations issued during regular inspections. The balance of the increase is requested to annualize increases previously granted. This includes the full salary cost of inspectors previously hired, grade promotions, within-grade salary advancements, and travel costs.

Education and Training - $5,884,000: The education and training program is directed toward improving mine health and safety by improving job skills and by creating an awareness of hazards and a positive attitude toward safer work habits.

To aid in achieving these objectives activities will continue to be directed toward expanding the safety training capabilities in industry. These activities will include the training, monitoring, and certification of industry instructors by personnel of the MESA Training Centers. Another aid will be the identification of training needs by the analysis of accident data to be followed by intensified training where high accident rates are identified.

An improved program for education and training recently has been established. This program includes an 8 to 10 week indoctrination course on inspection work for newly employed Federal Mine Inspectors (this course is to be taken before the start of on-the-job training and subsequent assignment of inspection duties); refresher courses of 2 to 6 weeks duration designed to update periodically the skills and knowledge of all inspection personnel; and an intensive 12 month course of study for inspector trainees. The new Federal Health and Safety Academy (now under construction) when completed will greatly enhance the education and training program.

The apppropriation request for this activity reflects a program decrease of $1,500,000 because of one-time funds appropriated in 1974 to complete the construction of the Academy at Beckley, West Virginia.

Technical Support - $9,144,000: Under this activity, MESA provides engineering services on health and safety problems to the mining industry as a whole, to individual mine operators, and to the manufacturers of mining equipment and supplies. Specifically, the major aspects of the technical support activity may be summarized as follows:

1. Provide answers to immediate mine health and safety problems that could be solved with existing technology, thus facilitating compliance with the Act.

2. Maintain continual review of currently promulgated standards in the light of new technologic development and recommend justifiable changes.

3. Develop standards for safety and reliability of both new and modified pieces of equipment and materials used in mining and test those items for which Bureau approval is required by law and other items as appropriate or requested by the industry.

4. Upgrade the Bureau's capability for rescue and recovery of entrapped miners, while maintaining the capability to deploy existing Bureau equipment for an emergency.

5. Maintain contact with health and safety research programs, communicate research results to enforcement groups, and keep the Bureau's research organizations informed of problem areas that need to be studied.

6. Train key engineering people in the Bureau in ventilation, roof support, and other technical specialties.

7. Collect, compile, and disseminate injury data and analyze injury experience in depth to identify the causative factors as a guide to education and training programing and to enforcement and research activities.

8. Develop and maintain a computerized mine information system and programs for use throughout the Health and Safety activities as an essential element of ongoing operations and as a tool for planning.

An increase of $1,235,000 is requested for additional personnel to assist in solving technical and engineering problems and equipment testing and to provide for short term investigations.

The Administration's effort in relation to the multitude of problems associated with metal and nonmetal mining needs to be stepped up. Personnel increases will enable technical assistance to have a significant impact on mine health and safety. This will provide for a closer coordination with the enforcement of standards and regulations in the areas of ground control, ventilation, industrial safety, and industrial hygiene. Mine wastes and tailings embankments are critical problem areas. Expanded engineering capability will permit the development of improved standards for embankment design and construction and on-site evaluation of critical embankments near populated areas.

Program administration - $1,516,000: This activity provides for the immediate Office of the Administrator and the key administrative staff that support the general administrative functions. The balance of the cost for administrative functions is charged to program funds. In addition, this activity provides funds to reimburse the Bureau of Employee Compensation, Department of Labor, for payments made because of injury or death of employees.

Salaries and Expenses

Appropriation, 1973		$64,623,000
Transferred from Geological Survey for increased pay costs		684,000
Transferred to "Operating Expenses, Public Buildings Service," General Services Administration		- 587,063
Total Available, 1973		64,719,937
Appropriation, 1974	$53,124,000	
Supplemental Appropriation, 1974	3,370,000	
Pay Cost Supplemental (January and October pay raises)	3,546,000	
Total Appropriation, 1974		60,040,000
Transferred to "Operating Expenses, Public Buildings Service," General Services Administration		- 327,000
Total Available, 1974		59,713,000

Summary of Increases and Decreases, 1975

	Base for 1975	Increase 1975	
Coal Mine Health and Safety Inspection:			
Annualization of Increases previously granted	$35,663,000	+$3,220,000	+ 3,220,000
Metal and Nonmetal Mine Health and Safety Inspections:			
Annualization of increase previously granted	--	+ 1,000,000	
Increased metal and nonmetal mine inspection program	8,009,000	+ 1,100,000	+ 2,100,000
Education and Training:			
Completion of Health and Safety Academy at Beckley, West Virginia	1,500,000	- 1,500,000	- 1,500,000
Technical Support:			
Increased effort in solving technical and emergency problems and equipment testing	7,588,000	+ 1,235,000	+ 1,235,000
Employee Compensation Payments	302,000	+ 28,000	+ 28,000
Annualization of October 1973 Pay Raise	--	+ 787,000	+ 787,000
Allowance for Leased Space	--	+ 2,563,000	+ 2,563,000
Net Increase, 1975			+ 8,433,000
Budget Estimate, 1975			68,146,000

SALARIES AND EXPENSES

Analysis by Activity

Activity	Fiscal Year 1973 Amount Available	Fiscal Year 1974 Total Appropriation	Pay Cost Supplemental	Transfers 1/	Amount Available
1. Coal mine health and safety inspections	$32,039,421	$33,604,000	$2,386,000	$-327,000	$35,663,000
2. Metal and nonmetal mine health and safety inspections	6,095,520	7,574,000	435,000	- -	8,009,000
3. Education and training	5,275,807	19,737,341	243,000	- -	19,980,341
4. Technical support	6,866,424	7,194,000	394,000	- -	7,588,000
5. Program administration	1,223,919	1,301,000	88,000	- -	1,389,000
Unobligated balance, start of year	- -	-12,916,341	- -	- -	-12,916,341
Unobligated balance, end of year	12,916,341	- -	- -	- -	- -
Unobligated balance lapsing	302,505	- -	- -	- -	- -
Total	64,719,937	56,494,000	3,546,000	-327,000	59,713,000

1/ Represents transfer to General Services Administration.

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SALARIES AND EXPENSES

Analysis by Activities

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
1. Coal mine health and safety inspections ..	$32,039,421	$35,663,000	$40,863,000	$ 5,200,000
2. Metal and nonmetal mine health and safety inspections	6,095,520	8,009,000	10,739,000	+2,730,000
3. Education and training	5,275,807	19,980,341	5,884,000	-14,096,341
4. Technical support	6,866,424	7,588,000	9,144,000	+1,556,000
5. Program administration	1,223,919	1,389,000	1,516,000	+ 127,000
Unobligated balance, start of year	- -	-12,916,341	- -	+12,916,341
Unobligated balance, end of year	12,916,341	- -	- -	- -
Unobligated balance lapsing	302,505	- -	- -	- -
Total	64,719,937	59,713,000	68,146,00	+8,433,000

1. Coal Mine Inspections: Fiscal year 1974, $35,663,000; fiscal year 1975, $40,863,000; increase, $5,200,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	+ $3,220,000	--	--	--	Annualization of increases previously granted.
(2)	+ 477,000	--	--	--	Annualization of pay increase granted in FY 1974 (E.O. 11789).
(3)	+ 1,503,000	--	1,503,000	--	Reimbursement for space provided by GSA in accordance with P.L. 92-313.
	+ $5,200,000	--			

NEED FOR INCREASE

$1,290,000 is requested to provide for increased salary costs for inspection personnel being promoted to the full performance level of their positions. $1,930,000 is requested to provide for the full year costs associated with the employment of 263 coal mine inspectors, assessment officers, and clerical support authorized in the Supplemental Appropriation Act of 1974.

PROGRAM OF WORK

The major objective of the coal mine inspection program is to provide the coal miner with a safe and healthful environment in which to work.

The Federal Coal Mine Health and Safety Act of 1969 has provided both the responsibility and the authority to require that the necessary corrective action be taken while at the same time providing assistance to the operator in devising ways to correct existing hazards. The Act requires four complete safety and four complete health inspections be made of each underground mine to ensure a safe and healthful environment. In addition, one spot inspection of each mine classified as hazardous is required to be made every five working days, plus special inspections to include roof control, ventilation, electrical, transportation, and similar items are made as required by the individual mine. Although, the Act does not specify the number of inspections for surface mines, MESA requires at least two complete safety and one complete health inspection each and as many spot inspections as may be required to gain compliance with the Act.

In addition, thousands of special inspections are made in the mines to determine whether violations of the Act, as reported in notices issued, have been abated in the time set by the inspector, whether conditions or practices that caused the issuance of Withdrawal Orders have been abated to the extent that the orders can be revised or terminated, and whether Withdrawal Orders are being complied with.

Coal Mine Inspections

	Calendar Year 1973 (Forecast)	1974 (Forecast)
Underground Mines		
Complete safety inspections	7,000	6,000
Complete health inspections	7,000	6,000
Spot safety inspections	12,000	26,000
Spot health inspections	4,000	4,000
Spot safety inspections of hazardous mines	15,000	8,000
Other inspections and surveys 1/	10,000	10,000
Subtotal	55,000	60,000
Surface Mines		
Complete safety inspections	4,000	3,700
Complete health inspections	2,000	3,700
Spot safety inspections	2,500	2,000
Spot health inspections	2,500	2,000
Spot safety inspections of hazardous mines	1,500	1,000
Other inspections and surveys 1/	1,500	1,600
Subtotal	14,000	14,000
Investigations (Fatality, accident, violation follow-ups, etc.)	20,000	20,000
Total	89,000	94,000

1/ Includes all complete and spot electrical, roof control haulage, preparation plants, and river dock inspections.

The Act has committed both this organization and the industry to decrease not only the number of fatalities, but the number of injuries too. In an effort to accomplish this goal, several new programs have been added to better utilize our present inspection work force and strengthen the overall enforcement of the Act. In July 1973, a program of Accident Prevention Spot Inspections was initiated. The program consists of assigning an inspector to work permanently on a daily basis at a mine with a higher frequency rate than the national average and employing over 200 men. The purpose of this program is to give the inspector freedom to use his own initiative to bring about a decrease in the number of injuries at his assigned mine. Specialists in Accident Prevention and Investigation are being assigned to the district offices in order to provide a more indepth analysis of the cause and possible prevention of fatalities and serious injuries.

Past programs to be continued in the future include the "Winter Alert," aimed at decreasing accidents during coal minings most hazardous period, and the utilization of specialists in roof control, haulage, ventilation, and electricity in an effort to correct bad practices or systems and thereby reduce the number of mining accidents.

Inspection manuals on both health and safety for underground and surface mines are being updated frequently and copies are furnished to operators and mine workers organizations to apprise them of the application of the Act and thereby hopefully gain more safety through a thorough understanding of what is specifically required by the Act and other measures necessary for a safe and healthful mine.

MESA will continue to provide personnel and other assistance to the Interim Compliance Panel to enable it to carry out the functions under the Act. Essentially, the functions of the panel are to work toward the orderly implementation of the Act through authorization of temporary deviation from its mandatory provisions until required technology and equipment are available to correct the substandard conditions in a particular mine.

The Act also provides for assessing civil penalties for violations of the mandatory health and safety standards and other provisions. In carrying out these functions, violation citations are reviewed to insure that a violation did occur, ascertain the circumstances surrounding the violation, determine the degree of liability, establish the amount of penalty that is warranted, and review cases for formal adjudication.

The estimate includes $1,000,000 for grants to assist States in financing the cost of improvements in their mining safety programs as provided in the act. Specific objectives of the grants are to develop and enforce more effective coal mine health and safety laws and programs related to coal mine employment, and to promote Federal-State coordination and cooperation in improving health and safety conditions in coal mines. Section 503 of the Act directs the Secretary of the Interior to approve applications by the States for Federal grants if they meet certain criteria specified in the Act.

EXAMPLES OF RECENT ACCOMPLISHMENTS

Fatalities in coal mines have been reduced from 181 in 1971 to 156 in 1972 with a corresponding drop in the fatal injury frequency rate per million man-hours from 0.72 in 1971 to 0.56 in 1972. The corresponding number of fatals through November 1973 is 128 with a fatality frequency rate of 0.47.

Respirable dust levels in underground mines have continued to decrease since the 2 milligrams per cubic meter level became effective on January 1, 1973. As of November 1973 over 90 percent of the underground working sections are in compliance with the new standard and 60 percent of the underground sections are now at or below the 1.0 milligram level of respirable dust concentrations.

From the standpoint of work statistics, 26,000 inspections were made in 1971, 65,000 in 1972, and about 85,000 will be made in 1973. In 1971, 64,000 Notices of Violation were issued, in 1972, 76,000, and according to present trends, 72,000 will be issued in 1973.

The following are some of the significant programs which have been initiated to improve coal mine health and safety:

After the success of the campaign against roof fatalities which was initiated in July 1971, a similar program was developed for haulage fatalities. Revised guidelines were issued in August 1972 to increase the scope of the haulage program, and haulage fatalities have been reduced from 37 during the period January - November 1972 to 29 for the same period of 1973.

In the area of waste banks and silt retaining dams, Coal Mine Health and Safety moved quickly in cooperation with other Federal and State agencies to inventory potentially hazardous sites. These potentially hazardous sites have been and

are in the process of being evaluated for difficiencies, and recommendations are being given to all affected coal mine operators as to how to correct these hazards. Teams of qualified engineers have inspected over 200 sites in 5 states as part of this ongoing program. In addition, all Coal Mine Health and Safety inspectors have been trained to recognize the signs of instability in coal waste banks. A new program has been initiated to inspect all waste banks associated with active mines in conjunction with the complete inspection of the particular mine. An inspection manual specifically for coal waste deposits has been prepared to assist the inspection work force and any interested parties. New regulations have been drafted and are scheduled to be released in early 1974. The new regulations stipulate the requirements for design, construction, maintenance, and abandonment of all coal waste deposits which present a potential hazard to miners or mine property.

Regulations under Title 30 of the Code of Federal Regulations have been rewritten and published in the Federal Register. The revised regulations are designed to increase the effectiveness in programs such as the operators' sampling program for respirable dust, cabs and canopies to decrease the number of roof fall fatalities, and fire suppression devices. In addition to those regulations already promulgated, preparations are continuing for new regulations on diesel equipment and explosives.

A recent decision of March 19, 1973, by the Interior Board of Mine Operations Appeals ruled that all contractors that perform work on mine property and maintain supervisory control are required to comply with the Coal Mine Health and Safety Act of 1969. At the present time, MESA has issued identification numbers to over 300 contractors working on mine property who maintain supervisory control. This represents a substantial increase in the number of inspections to be completed each year, and Coal Mine Health and Safety has initiated efforts to inspect these contractors sites.

2. Metal and Nonmetal Mine Inspections: Fiscal year 1974, $8,009,000; fiscal year 1975, $10,739,000; increase $2,730,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	+ $2,100,000	+ 85	$10,269,000	456	To increase metal and nonmetal mine inspection frequency and annualization of increase previously granted.
(2)	+ 470,000	--	470,000	--	Reimbursement for space provided by GSA in accordance with P.L. 92-313.
(3)	+ 160,000	--	--	--	Annualization of pay increase granted in FY 1974 (E.O. 11789).
	+ $2,730,000	+ 85			

COST FACTORS INVOLVED IN INCREASE

Of the $2,100,000 increase requested, $1,100,000 will provide for 75 mine inspectors and 10 support personnel for an average of 7 months at a cost of $840,000; personnel benefits, $71,000; travel, $59,000; supplies, equipment and other expenses, $130,000. The balance of $1,000,000 is to cover the annualization of salaries and costs of personnel and travel obligated under the increases previously granted.

NEED FOR INCREASE

The proposed increased funding is needed to enable MESA to strengthen and intensify metal and nonmetal enforcement programs in order to achieve a major reduction of injuries, occupational diseases, and deaths in metal and nonmetal mines.

$1,100,000 is requested to employ and train an additional 75 inspection personnel recruited in several stages during fiscal year 1975, thus increasing the inspection staff from 225 to 300 by year end. With these additions the total number of inspections would be increased from 17,500 forecast for fiscal year 1974 to 23,000 projected for fiscal year 1975. This would provide for regular inspections of each active underground mine at an average rate of 4 times a year, and for regular inspections of approximately three-fourths of all metal and nonmetal surface mining operations at least once during the year. It would also provide for the necessary spot and follow-up inspections to insure compliance with citations issued during regular inspections. In addition, the increase would provide for an expansion of the health inspection program; increased inspection frequency at those mines identified as having high injury rates or problems in standards compliance; accelerated health and safety standards development; increased inspector training; and the initiation of a job safety analysis program.

$1,000,000 is requested to meet the costs for a full year of the salaries for the personnel previously hired, plus travel costs and grade promotions, and the within-grade salary advancement required by statute.

PROGRAM OF WORK

The principal objective of the Federal Metal and Nonmetallic Mine Safety Act (P.L. 89-577) is to promote safe and healthful working conditions throughout all noncoal mines within the United States and its territories. To accomplish this objective, the Mining Enforcement and Safety Administration (MESA) has responsibility for the development and implementation of an effective inspection program for all metal and nonmetal mines to obtain compliance with promulgated health and safety standards.

The inspection program covers more than 13,000 active and an estimated 4,000 inactive mines and mills throughout the nation and involves observations and measurements of conditions and practices to determine compliance with mandatory health and safety standards. Notices of noncompliance or withdrawal orders are issued if violations of mandatory standards or imminent danger conditions are found, and follow-up spot inspections are made to determine if such violations have been corrected.

The Act requires only that each underground mine be inspected at least once annually; it does not specify the inspection frequency at surface mining operations. The inspection program to date has not resulted in the desired reduction of injuries and deaths in the metal and nonmetal mining industry. MESA believes

that in order to achieve a significant lowering of injury and fatality rates, the inspection program must be expanded beyond the minimum requirements of the Act. We are now of the opinion that the minimum inspection frequency should be at least 4 inspections a year at each open pit metal mine, and one regular inspection annually of all sand and gravel operations, stone quarries, and nonmetal open pit mines. Inspection experience has shown that at least one follow-up spot inspection is needed for each regular inspection in order to achieve full compliance with citations issued for violations of health and safety standards or for imminent danger conditions noted during the regular inspection.

Thus far, nearly all health-related inspection work has been in the nature of screening to identify gross violations of mandatory standards. Fewer than 5 percent of all inspections have included dust measurements; less than half the underground inspections have included air quality measurements; and only minimal information has been obtained regarding miners' exposure to a wide variety of potential health hazards. The health inspection work will be expanded in FY 75. This expansion will constitute a significant step towards the MESA program of providing sufficient personnel for expanded health programs to eliminate the causes of diseases and physical impairments originating in the mines.

The development and promulgation of more comprehensive and effective health and safety standards will continue to be stressed. Because the preparation of good, practical standards and the revision of existing standards involves participation by a knowledgeable inspection force experienced in enforcing standards, we plan to continue utilizing the experience of our inspector force in the formulation of enforceable and appropriate health and safety standards. In order to maintain uniformity in the application of standards, work will continue on the development of guidelines and procedures to carry out the inspection program. Inspector training to keep the inspection force abreast of technologic changes in the mining industry, and to improve their effectiveness and efficiency is another important activity that will be expanded in fiscal year 1975.

As the inspection program is expanded and refined, more and more attention will be given toward identifying conditions and practices which might result in large loss of life. Those mines identified as having problems in standards compliance or which have high injury frequency rates will be inspected more frequently than others. Further, a job safety analysis program will be initiated. This program anticipates increased inspector presence at selected mines for the purpose of conducting special investigations and studies to detect and analyze specific problems and to develop strong counter-measures to eliminate the problems disclosed.

The Act provides that MESA may enter into agreements with the various State mine inspection agencies whereby the State agency maintains the primary responsibility for the enforcement of promulgated health and safety standards. Once a State has met certain requirements and has agreed to certain conditions, a State Plan Agreement is signed between the Department of the Interior and the State. Once this Agreement has been consummated, the role of MESA is one of monitoring the effectiveness of the State Agency's enforcement program. This is carried out through a joint Federal-State inspection program and a State report system. The State Agency must report to the Bureau on each State inspection indicating violations which are cited and conditions which have been corrected. State Plan Agreements are presently in effect with Arizona, California, Colorado, New Mexico, New York, and Utah. In these States our objective in FY 75 will be to conduct a minimum of one joint inspection (Federal and State) a year of each underground mine and each open pit metal mine, and a minimum of one joint inspection every two years of each sand and gravel, crushed stone, and open pit nonmetal mine. Follow-up spot inspections and special investigations will also be conducted.

MESA will continue to make inspections of explosives storage facilities at mines and mills on behalf of the Bureau of Alcohol, Tobacco and Firearms, Internal Revenue Service, under Part 181 of Title 26, Code of Federal Regulations. This is being done without additional compensation to MESA to prevent unnecessary duplication and overlap by Federal agencies.

MESA will also continue to make investigations of all mine-related fatal accidents, and to increase investigations of serious nonfatal accidents. The purpose of these investigations is to determine the causes and circumstances of such accidents and to institute the necessary corrective actions including development of new or revised standards designed to prevent occurrence of similar accidents in the future.

EXAMPLES OF RECENT ACCOMPLISHMENTS

Perhaps the most significant accomplishment in 1973 has been the achievement of a marked reduction in the number of fatal injuries inflicted on our underground miners. Although any fatal injury is a tragedy, and the inspectorate is striving to prevent these tragedies, a very significant decrease has been made in the number of fatal injuries suffered by the miners. In 1972, 234 men lost their lives in preventable mining accidents as compared to 165 fatalities during 11-1/2 months of 1973.

Experts in the fields of fire prevention, radiation, explosives, travelways and escapeways, man hoisting, haulage and other subjects that deal with the most hazardous of mining conditions, have been called to form standards development committees for the purpose of drafting new accident control standards and re-evaluating existing standards. These committees have expended thousands of man hours developing concise, meaningful standards, that when promulgated as regulations, will result in the conservation of life and property. Approximately 150 standards have been developed to date, and these are presently being considered for promulgation and publication in the Federal Register. Nine new mandatory standards were promulgated, 4 advisory standards were upgraded to mandatory status, and 3 advisory standards were revoked.

Four of the most important of these proposed mandatory standards, which affect the lives of mine employees, are being readied for promulgation. These vital standards provide for periodic evacuation drills, instruction in alarm signals, instruction in escape plans procedures and an accurate check-in and check-out record system for underground mine employees. It is very significant to note that many mining operations are implementing the requirements of these 4 proposed standards which have not yet been promulgated.

The inspection program, the most important tool used in accident prevention, is rapidly expanding in numbers of mines inspected and in the quality of inspections. It is reaching its planned goal of an estimated 17,000 inspections to be made in 1973, compared to 13,000 inspections in 1972. This 45 percent increase in inspections was achieved with but a 20 percent increase in the inspector force. This represents a remarkable achievement considering that each new inspector had to receive three to four months of internal training before becoming a duly authorized inspector. During 1973, about 64,000 notices of mandatory standards violations were issued compared to 54,800 in 1972, an increase of 17 percent. The maturity of the inspectors is exemplified by the statistics relating to closure orders. Clear, unequivocal policy statements were issued in 1972 relative to fair, impartial, and uniform application of the law. As a result, the number of closure orders issued in 1973 will be approxi-

mately 1,000 compared to 210 orders issued in 1972, and only 56 orders in 1971. The inspectors are applying the standards intelligently and issuing the closure orders and notices on their own initiative, with but occasional recourse to the District Managers for guidance. Some 600 of the closure orders were issued because of conditions of imminent danger to workers in the mines. These orders had the effect of eliminating extrahazardous conditions that could have caused serious injury or death to one or more workers, or possibly multiple fatalities of disaster proportions.

A comparison of fatality statistics for the years 1973 and 1972 dramatically shows the necessity of more frequent inspections at all mines. The rise in fatalities in underground mines and mills over the past ten years has been sharply arrested, whereas fatalities in surface mines have increased drastically, almost 39 percent more in 1973 compared to 1972. The major thrust of increasing inspections of underground mines and related mills at the expense of reduced numbers of inspections at surface operations emphasizes the need for a substantial increase of qualified mine inspectors. The overall inspection program has been seriously affected because of too few inspectors to handle the workload, and inspect all mines at a rate necessary to significantly reduce the number of accidents. Fortunately, a 1.5 million dollar supplement was made available for hiring 75 additional inspection personnel. During FY 74, approximately 40 persons have been added to the staff, and the remaining 35 will be hired in the next 6 months. Incumbents in this group will be given a 6-week course of intensive training during January through April 1974 at the Mine Health and Safety Academy to expedite their qualification as duly authorized mine inspectors.

Basic procedures for monitoring and evaluating the effectiveness of States' inspection and enforcement capabilities have been developed and are undergoing improvement. Utah, in September 1973, became the sixth state to adopt a State Plan Agreement.

Enforcement of health standards was concentrated on two major health hazards, radiation and asbestos. One enforcement action resulted in a complete renovation of the dust collection system at an asbestos mill requiring an investment of about one half million dollars. Another operation with an asbestos dust hazard constructed a complete new mill utilizing a wet process to control dust.

Every underground mine was examined for radiation hazards. In addition to uranium mines, seven other mines were identified as having potential radiation problems. Most of these were readily controlled by ventilation but one large tungsten mine requested and was granted a variance to complete extensive additions to the ventilation systems.

A public symposium was held to obtain information on the toxic and mineralogical properties of talc and tremolite. The purpose of the symposium was to provide guidance and justification for health standards pertaining to talc and asbestos.

The one major obstacle to conducting complete industrial hygience inspections at an effective frequency is a lack of manpower. The same inspectors do both health and safety inspections. Because of the time required to do a complete industrial hygiene survey, we are able to do only a limited number while still maintaining the frequency of safety inspections. Therefore, most industrial hygiene work is simply a screening to identify particularly severe hazards. Additional personnel are being added to provide additional capabilities in the health program. These are technicians to perform the laboratory phases of dust weighing and instrument calibration. Additional inspectors are also being assigned to this program.

A revised management data system was put into operation. The system is now essentially free of errors and is capable of maintaining a historical record of inspection activities. It will not be a useful test for management decisions until immediate access to the information can be accomplished. Telecommunication terminals are being acquired for this purpose. State Plan inspection data is being collected by automatic data processing and this information is being returned to the State agencies for their use.

3. Education and Training: Fiscal year 1974, $7,064,000; fiscal year 1975, $5,884,000; decrease, $1,180,000. The decrease consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	+ $ 40,000	--	--	--	Annualization of pay increase granted in FY 1974 (E.O. 11789).
(2)	+ 280,000	--	$280,000	--	Reimbursement for space provided by GSA in accordance with P.L. 92-313.
(3)	- 1,500,000	--	--	--	Amount appropriated for completion of Health and Safety Academy in Beckley, West Virginia.
	- $1,180,000				

PROGRAM OF WORK

Greater emphasis will be placed on broadening the spectrum of services to: (1) assist the mining industry to meet Federal and State regulatory health and safety requirements for training of certified and qualified workers; (2) enhance MESA in-house capabilities, particularly for training new Federal Mine Inspectors, continue to upgrade the present inspection force, provide training in special safety programs for industry such as haulage safety; and (3) provide assistance to the mining industry on programs of education and training, where health and safety is the theme.

Promulgation of the Federal Coal Mine Health and Safety Act of 1969 has brought about a change in the attitude of the mining industry towards training. The need for health and safety training has been accepted and MESA is assisting the industry to provide the needed training.

Regulations are being promulgated which require men without previous mining experience to have safety training prior to working underground in coal mines. This will require additional training and training materials to be developed. An intensive training program for industry instructors will be required to make this program operational. Additional standards requiring mandatory training in underground metal mines have been promulgated. These new training requirements will eventually call for additional training personnel and supporting audio visual and training material services.

In order to respond to the need and to the many requests from industry for training assistance, MESA operates nine Education and Training Centers throughout the country. The Centers are staffed with instructors who provide the needed training when and where industry requests it. The programs offered through the Centers are primarily instruction in such areas as: Mine rescue, first aid, accident prevention, roof and rib control, haulage safety, and many others. Although relatively new, the training centers are having a significant impact and are constantly increasing their training capabilities.

In addition, Education and Training plans, develops, and disseminates health and safety training courses, course materials and training aids. These courses are designed to help qualified instructors both within the mining industry and at MESA's Training Centers to organize and present classroom training in various health and safety subjects such as: mine ventilation, oxygen deficiency and methane detection, fighting mine fires, and safety management. To enrich and enhance course instruction and to meet specific requirements, motion picture films, television productions, and other audio-visual aids are developed.

An improved program for education and training in MESA has been established by the Federal Mine Health and Safety Academy at Beckley, West Virginia. This program includes, an 8 to 10 week indoctrination course on inspection work for newly employed Federal Mine Inspectors (this course is to be taken before the start of on-the-job training and subsequent assignment of inspection duties); refresher courses of 2 to 6 weeks duration designed to update periodically the skills and knowledge of all inspection personnel; and an intensive 12 month course of study for mine inspector trainees. The new Academy, when it's permanent facilities are completed, will also be able to accommodate a sizeable number of mining industry workers.

As the need for training intensifies, MESA will continue to coordinate and cooperate with State and Federal agencies and private organizations to accomplish the desired objective. Experimental programs for the upgrading of mine employees, or for the pre-employment training of prospective miners where health and safety is tied closely to skills development, are being conducted through a Federal Inter-agency Funding Agreement with the Department of Labor, and the Department of Health, Education, and Welfare. Cooperative training efforts with Labor, HEW, and the State of Arizona are being initiated to conduct a comprehensive training program for the Papago Indians in mining and related fields. The proposed construction and use of a simulated mine for training purposes, the investigation of the cultural and behavioral factors involved in mine health and safety education and training, and closer ties with State organizations are characteristic of the new and total effort of MESA to eliminate mine accidents and health hazards.

Education and Training is carried out as an integrated program serving both the coal and metal and nonmetal mining industries. It is estimated that the program costs are divided as follows: Coal $4,295,000; and metal and nonmetal, $1,589,000.

EXAMPLES OF RECENT ACCOMPLISHMENTS

To help meet meet the requirements for health and safety training of miners, as specified by the Federal Metal and Nonmetallic Mine Safety Act of 1966 and the Federal Coal Mine Health and Safety Act of 1969, personnel of the nine MESA training centers presented courses in such key subjects as first aid, accident prevention, roof control, electricity, and mine rescue to almost 75,000 coal

miners and 15,000 noncoal miners. These figures represent increases of 25 and 50 percent respectively over those of the previous year. In this training, considerable emphasis was placed on the training and certification of industry instructors with a resultant doubling of the number of cooperative industry instructors. These certified cooperative instructors in turn trained 165,000 coal miners and 32,000 noncoal miners with the increases over the previous year being respectively 135 and 165 percent approximately.

Coinciding with the increased training effort among coal miners was a significant decrease in fatalities in coal mines from 260 in 1970, to 181 in 1971, and to 156 in 1972, with a corresponding drop in the fatal injury frequency rate per million man hours from 1.00 in 1970, to 0.72 in 1971 and to 0.56 in 1972. Fatalities in metal mines on the other hand rose from 56 in 1971 to 135 in 1972 as a result of the Sunshine Mine disaster.

Much of the increased training effort among metal miners occurred after the disaster and was concentrated in areas designed to reduce loss of life in the event of fires in underground mines. In one limited area where a concentrated training program was carried out after training needs were identified from the analysis of accident data, a significant reduction in accident rates followed.

The training centers are staffed with 80 full-time instructors who can offer over 90 courses. To support the training program new courses were developed to provide job safety guides for six specific tasks, and the appropriate text books, manuals, and audio-visual aids were produced. Two motion picture films, one on noise hazards in underground coal mines and one on ventilation in metal and nonmetal mines, together with a series of seven films on first aid fundamentals, were completed. During 1973 MESA safety films were shown over 7,000 times to over 200,000 attendees. Moreover, MESA health and safety films shown on T.V. were viewed by an estimated 70 million people.

The Federal Mine Health and Safety Academy in Beckley, West Virginia, was opened in 1971 to train selected government and industry personnel to be professional mine health and safety experts. Toward this goal the Academy has offered a one year program for inspector trainees, a ten-week course for newly hired coal mine inspectors, a short retraining course for coal mine inspectors, and specialized short courses for industry personnel.

The first class of inspector trainees numbered 52. Of these, 26 were graduated in August 1972 and 19 in February 1973. In the past year 88 new coal mine inspectors took the 10-week course, 17 inspectors took a retraining course in electricity, and 44 industry personnel were trained in electricity. In addition, course material for the inspector trainee program was revised and updated in the areas of electricity, ventilation, roof control, mining methods, haulage and transportation.

Working drawings and specifications for permanent quarters for the Academy were completed. Site clearing and preparation work was also completed and a contract awarded for construction of the group of five contiguous buildings, which includes the dormitory wing, the administrative and support services core building, the academic wing with laboratories, the heavy equipment shop-laboratory, and the gymnasium.

Another approach to promoting health and safety in mining is furnished by the Holmes Safety Association, which consists of a National Council, State councils, district counsels, and local chapters. The objectives of the Association are to prevent fatalities and injuries and to improve health and safety among officials and employees in all phases of the mineral industries.

A major effort was made to expand the Association's activities among metal and nonmetal miners with the establishment of 55 new chapters. The Association also continued active work among coal miners, particularly by the introduction of safety notes based on fatal injury reports, and short safety talks on such topics as the law, safety regulations, etc., which were sent to mine foremen each month. The cooperative effort begun several years ago with the Department of Labor and the Department of Health, Education, and Welfare to utilize resources of the Manpower Development and Training Act program for pre-employment miner entry training programs continues. Special emphasis is being placed on the design and conduct of such programs in entry level training for new operations being developed on Indian lands for both open pit and underground mining and aimed at the development and employment of Indians.

In addition, programs to upgrade mine workers in mine supervision, electricity, mine rescue, machine maintenance and operation, etc., is being continued, and a program for improving communication for Federal Mine Inspectors has been included. Greater emphasis is being placed in coordination and promulgation of pre-employment training programs through state and local resources under Special Revenue Sharing guidelines. In all cases, mine health and safety is stressed.

4. Technical Support: Fiscal Year 1974, $7,588,000; fiscal year 1975, $9,144,000; increase $1,556,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	+ $ 750,000	45	$8,429,000	300	Additional personnel for solving technical and engineering problems and equipment testing.
(2)	+ 485,000	--	485,000	--	To provide for short term investigations and technical development not included in H & S research program conducted by Bureau of Mines.
(3)	+ 230,000	--	230,000	--	Reimbursement for space provided in accordance with P.L. 92-313.
(4)	+ 91,000	--	--	--	Annualization of pay increase granted in FY 1974 (E.O. 11789).
	+ $1,556,000	45			

COST FACTORS INVOLVED IN INCREASE

(1) 45 professional and support personnel, $472,000 (approximately 70 percent of the annual salary load reduced on the basis of estimated hiring lag); personnel benefits, $40,000; travel, $54,000; supplies, equipment, and other expenses, $184,000.

(2) Contractual services, $485,000.

NEED FOR INCREASE

(1) The degree and multitude of problems in Metal and Nonmetal Mine Health and Safety has caused technical assistance in this area to be little more than a "brushfire" approach, with minor impact for any significant improvements. Personnel increases will enable technical assistance to have a significant impact on Health and Safety. This will also provide for a closer coordination with the enforcement of standards and regulations in the areas of ground control, ventilation, industrial safety and industrial hygiene.

Mine waste and tailings embankments are an extremely critical problem area, a fact which has been confirmed by failures in New Mexico and Arizona. Present technical capability is grossly inadequate. Expanded engineering capability will permit the development of improved standards for embankment design and construction and onsite evaluation of critical embankments near populated areas. An excessively high incidence of serious injuries involving machinery can be expected to continue for as long as adequate technical and engineering criteria are lacking. An increase in accident analysis and technical assistance in this area will enable MESA to meet its responsibilities.

(2) Technical Support personnel, in its field work, often encounters unexpected problems requiring "quick fix" solutions that do not lend themselves to the timing of the normal budget cycle. With a relatively small level of funding such problems or solutions could be examined and dealt within a short time frame and thus provide an opportunity to conclude contractual arrangements for remedying health and safety problems expeditiously.

PROGRAM OF WORK

Technical Support serves in a technical advisory role to the Mining Enforcement and Safety Administration, the Department of the Interior, other Government agencies, and Congress in their responsibilities in making enforcement, management or statutory decisions. In addition to its technical advisory role, Technical Support provides engineering consulting services on related health and safety problems and where the problems are complex, technical investigations are conducted, followed by recommendations for corrective measures. Another important function of Technical Support is the collection and dissemination of accident data and the conduct of special studies on representative mine operations to identify specific hazards requiring greater attention and subsequent elimination.

In conjunction with the above effort, Technical Support also has the responsibility of reviewing existing mandatory health and safety standards and making recommendations for their improvement. A related function is the continuing evaluation and recommendation of standards and the testing and approval of equipment and materials meeting the standards for safe operation or use underground.

Technical Support has the important responsibility to assist in rescue operations at a mine site in the event of a disaster. Systems developed for post-disaster rescues are updated, maintained, and serviced in ready condition for immediate deployment through contracts with private firms. The overall direction of an emergency rescue operation is the responsibility of permanently assigned Technical Support personnel.

Technical Support is carried out as an integrated program serving both the coal and metal and nonmetal mining industries. It is estimated that the program costs are divided as follows: coal, $6,440,000; and metal and nonmetal, $2,704,000.

EXAMPLES OF RECENT ACCOMPLISHMENTS

Technical Support has continued to provide assistance on critical engineering problems affecting the health and safety of miners, including ventilation, roof and ground control, coal waste embankment stability, dust collection or abatement, and other related health and safety practices, techniques and equipment.

Since the coal waste embankment failure in West Virginia in February 1972, which caused the Buffalo Creek disaster, Technical Support has conducted a vigorous program to assure the safety of all similar embankments in the country. In the summer of 1972, an emergency investigation of about 140 sites was conducted and recommendations were made on sites considered as potentially hazardous. Because of the constantly changing conditions as embankment constructions continued, all significant sites have been evaluated on a continuous basis. Largely through contract support and the assistance of Bureau of Reclamation engineers, between 200 and 300 sites in the Appalachian area have been under this evaluation process since the initial emergency investigation in 1972.

In the meantime, to lay an important foundation for the development of coal waste embankment technology in order to solve the long-term problem of embankment design and construction, a detailed engineering analysis was conducted by contract on the embankment failure in West Virginia. The report of this engineering study was released in early 1973. Several other major in-house and contract studies have also been initiated, all aimed at developing rational guidelines and criteria by which coal waste embankments can be designed, constructed, maintained, inspected, and evaluated on a systematic and engineering basis. As of early 1974, reports on these studies were under various stages of review and completion and scheduled for release during the year. A significant part of Technical Support's work of evaluating coal waste embankments and basic engineering studies was made possible by a special Congressional funding of $1 million in FY 1973.

As a result of an extensive evaluation program, resin-grouted bolts have been accepted by the coal industry and their use has been incorporated in approved roof control plans. Other significant achievements in the area of protecting against roof falls include improvements in roof bolt installation practices and the development of improved instrumentation to determine degree of anchorage and increased bolt load. A total of 140 field investigations were completed and 50 roof bolt and plate assemblies were evaluated in 1973 to determine their applicability for use in underground mines.

Regulations for the installation of cabs and canopies on underground equipment became effective in 1973. About 200 protective designs were investigated or tested during the year to determine their conformance to the specifications required.

Technical Support conducted or participated in over 250 field surveys in other areas of technical responsibility for the control of health and safety hazards in underground and surface coal, metal and nonmetallic mines. An outstanding example of these activities was related to a mine fire. The implementation of recommended techniques of utilizing ventilation pressure equalization in conjunction with effective sealants resulted in the confinement of this uncontrolled fire within a week.

In the laboratories, over 480,000 respirable coal mine dust samples were processed in 1973 to provide information for enforcement of the mandatory respirable dust standard. Analyses for specific components were also conducted on approximately 1,000 dust, 600 gas, and 160 industrial hygiene samples during the year.

A thorough review of brake performance on mobile equipment resulted in the development of criteria for testing brakes on new equipment at the factory as well as for systems installed on machinery at the mines.

Standards and regulations were either written or in the process of preparation for the use of diesel-powered equipment in underground coal mines, for illumination in working places, for approving material for use in underground mines, and for respirators.

The operation of a new coal mine accident and injury reporting system, implemented in early 1972, has begun to play an important role in MESA's effort to improve the safety record of the coal industry. Injury reports have been generated on a mine-by-mine basis and in a time frame that allows the enforcement and education and training organizations to direct greater efforts to accident prone mines. Reductions in accidents and injuries in some mines have apparently resulted from these increased efforts.

As part of Technical Support's accident analysis activities, special studies were conducted in electrical hazards, underground auger mining, roof bolting accidents, prediction of roof fall hazards, and front-end loader accidents. Reports on these studies were under review at year end.

5. Program Administration: Fiscal year 1974, $1,389,000; fiscal year 1975, $1,516,000: increase, $127,000. The increase consists of:

	Increase (+) or Decrease (-)		Total	Total	
	Amount	Positions	Program	Positions	Explanation
(1)	$+28,000	--	$330,000	--	To reimburse the Employee Compensation Fund
	+80,000	--	--	--	Reimbursement for space provided by GSA in accordance with P.L. 92-313
	+19,000	--	--	--	Annualization of pay increase granted in FY 1974 (E.O. 11789)
	+127,000				

NEED FOR INCREASE

Employee compensation payments--The increase of $28,000 is due, in part, to the higher salary levels which form the basis for compensation, cost-of-living increases, and the increased cost for medical care. In addition, new claims for compensation and long-term disability and death cases have increased.

PROGRAM OF WORK

General administration--The sum of $1,186,000 is requested to provide for the Office of the Administrator and the key administrative staff that support the general administrative functions. The balance of the cost for administrative functions is charged to program funds.

The Office of the Administrator provides executive direction in carrying out mine health and safety programs designed to control health hazards and to reduce fatalities and injuries in the mineral industries.

The general administrative functions include the development, presentation, and execution of budgets; administration of equal opportunity under civil rights laws and Executive Orders; planning, coordinating, and evaluating the Bureau's financial management program; maintaining payroll, retirement, and leave records; maintaining accounts for control of funds and recording assets, liabilities, and income and expenses, preparing financial reports; recruiting, training, placing, classifying, and servicing employees; management of ADP systems and programs; organization and staffing management; files, mail, and communication services; contracting for supplies, equipment, construction, research and development, grants, and other services; and recording, utilization, maintenance and disposal of Government property.

Costs of general administration are met from the Program Administration activity and from assessments against the four other activities. A breakdown of the source of funding is as follows:

	Amount Available 1974	Estimate 1975	Increase
Program Administration.....	$1,087,000	$1,186,000	$99,000
Other Administrative Funding:			
Coal mine health and safety inspections.....	760,000	790,000	30,000
Metal and nonmetal mine inspections.....	170,000	210,000	40,000
Education and training.....	120,000	120,000	--
Technical support.....	160,000	180,000	20,000
Total, administrative funding.....	2,297,000	2,486,000	189,000

Employee compensation payments--The $330,000 is to provide funds to reimburse the Employee Compensation Fund for payments made because of injury or death of employees under the jurisdiction of the Bureau of Mines, as required by Section 209 of Public Law 86-767.

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PERSONNEL SUMMARY

	Actual 1973	Estimate 1974	Estimate 1975
Total number of permanent positions	2,493	2,865	2,995
Full-time equivalent of other positions	51	70	70
Average paid employment	2,444	2,750	2,980
Average GS grade	9.4	9.3	9.3
Average GS salary	$14,289	$14,048	$14,198
Average salary of ungraded positions	$9,943	$10,440	$10,960

ITEMIZATION OF ESTIMATE
(in thousands of dollars)

Department of the Interior
Appropriation Title: Salaries and Expenses

Mining Enforcement and Safety Administration

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) or Decrease (-)
Program and Financing				
Total direct obligations	$51,417	$58,213	$68,146	+ $ 9,933
Total obligations, General Services Administration	84	14,416	--	- 14,416
Unobligated balance, start of year	--	- 12,916	--	+ 12,916
Unobligated balance, end of year	12,916	--	--	--
Unobligated balance lapsing	303	--	--	--
Budget authority	64,720	59,713	68,146	+ 8,433
Budget authority				
Appropriation	64,623	56,494	68,146	+ 11,652
Transferred to other accounts	- 587	- 327	--	+ 327
Transferred from other accounts	684	--	--	--
Appropriation (adjusted)	64,720	56,167	68,146	+ 11,979
Proposed supplemental for wageboard increases	--	30	--	- 30
Proposed supplemental for pay act increases	--	3,516	--	- 3,516

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) or Decrease (-)
Direct Obligations by Objects:				
11 Personnel compensation	$35,356	$41,013	$45,327	+ $4,314
12 Personnel benefits	3,193	3,475	3,751	+ 276
21 Travel and transportation of persons	2,887	3,408	3,863	+ 455
22 Transportation of things	781	875	995	+ 120
23 Rent, communications, and utilites	1,673	1,580	4,513	+ 2,933
24 Printing and reproduction	248	279	284	+ 5
25 Other services	2,907	3,266	4,518	+ 1,252
26 Supplies and materials	951	1,070	1,312	+ 242
31 Equipment	1,738	2,046	2,382	+ 336
32 Lands and structures	174	195	195	--
41 Grants, subsidies, and contributions	1,502	1,000	1,000	--
42 Insurance claims and indemnities	6	6	6	--
Adjusted for rounding	1	--	--	--
Total direct obligations	51,417	58,213	68,146	+ 9,933
ALLOCATION TO GENERAL SERVICES ADMINISTRATION				
21 Travel and transportation of persons	--	4	--	- 4
24 Printing and reproduction	--	8	--	- 8
25 Other services	84	188	--	- 188
32 Land and structures	--	14,216	--	- 14,216
Total obligations, General Services Administration	84	14,416	--	- 14,416
Total obligations	51,501	72,629	68,146	- 4,483

MINING ENFORCEMENT AND SAFETY ADMINISTRATION

Explanation of Administrative Provisions

Certificates and Trophies. It is essential to promote active mineral industry interest and participation to achieve health and safety objectives within the mineral industries. Certificates and trophies serve as an inducement towards these ends. They are used to award special achievement by individuals, industries, organizations, and associations for participating in activities such as mine rescue and first aid contests and for outstanding reductions in injury and fatality records.

Contributions. Various mineral industry organizations and associations have expressed interest in MESA's health and safety activities and are at times willing to contribute funds, experienced personnel, special equipment, etc., towards accomplishing MESA's objectives for making the industry a healthy, safe place of employment. MESA encourages cooperation with industry whenever possible and authorization to accept such contributions is a distinct aid in furthering such cooperation.

Cooperative Programs. Federal and State agencies, industries, and associations have demonstrated interest in cooperatively funded education and training programs to promote health and safety in the mining community. Authority to conduct such health and safety education and training programs provides the opportunity to augment MESA efforts in this area.

Mine Rescue and Survival Operations. MESA is responsible for providing manpower, expertise, and specialized equipment in assisting rescue operations at mine sites in the event of a major disaster. Appropriate MESA program funds have been used in the past to cover costs associated with such disasters. This administrative provision provides authority for the Department to authorize use of other funds in the event that disaster costs exceed MESA's funding capacity.

OBLIGATIONS INCURRED BY THE MINING ENFORCEMENT AND SAFETY ADMINISTRATION
BY ACTIVITY AND SOURCE OF FUNDS, FISCAL YEARS 1973, 1974, AND 1975

	1973	1974	1975
COAL MINE HEALTH AND SAFETY INSPECTIONS:			
MESA Appropriation	$32,039,421	$35,663,000	$40,863,000
Reimbursements	6,181	10,000	10,000
Department of Labor	13,021	--	--
Total	$32,058,623	$35,673,000	$40,873,000
METAL AND NONMETAL MINE HEALTH AND SAFETY INSPECTIONS:			
MESA Appropriation	$6,095,520	$8,009,000	$10,739,000
EDUCATION AND TRAINING:			
MESA Appropriation	$5,275,807	$19,980,000	$5,884,000
Department of Health, Education, and Welfare	162,000	170,000	170,000
Total	$5,437,807	$20,150,000	$6,054,000
TECHNICAL SUPPORT:			
MESA Appropriation	$6,866,424	$7,588,000	$9,144,000
Department of the Navy	25,234	25,000	25,000
Total	$6,891,658	$7,613,000	$9,169,000
PROGRAM ADMINISTRATION:			
MESA Appropriation	$1,223,919	$1,389,000	$1,516,000
Department of the Interior	8,000	5,000	5,000
Total	$1,231,919	$1,394,000	$1,521,000
SUMMARY:			
MESA Appropriation	$51,501,091	$72,629,000	$68,146,000
Reimbursements	6,181	10,000	10,000
Other Agencies	208,255	200,000	200,000
Total	$51,715,527	$72,839,000	$68,356,000

FUEL ALLOCATION, OIL AND GAS PROGRAMS

Fuel Allocation, Oil and Gas Programs: Fiscal Year 1974, $36,130,000; Fiscal Year 1975, $70,100,000; Increase, $33,970,000. The increase consists of:

Increase (+) Amount	Positions	Total Program	Total Positions	Explanation
1. (+)$33,400,000	--	$57,200,000	2,107	Annualization of program funding and staffing increases provided by FY 1974 Supplemental Appropriations Act for Petroleum Allocation Program (including Compliance and Enforcement activity)
2. (+)$ 570,000	--	$2,900,000	118	Annualization of program funding and staffing increases provided by FY 1974 Supplemental Appropriations Act for coordination of Oil & Gas Activities.
(+)$33,970,000	--			

Cost Factors Involved in Increase: Increases due to full year costs of: Salaries and benefits $23,800,000; travel, $1,700,000; rent, communications, utilities, $1,300,000; printing and reproduction, supplies, and equipment, $2,470,000; and other services, $4,700,000.

DEPARTMENT OF THE INTERIOR
FUEL ALLOCATION, OIL AND GAS PROGRAMS
SALARIES AND EXPENSES

EXHIBIT 1

Appropriation 1973	$1,485,000	
Total Appropriation, 1973		$1,485,000
Appropriation 1974	2,585,000	
Supplemental Appropriation Act, 1974	33,545,000	
Total Available, 1974		36,130,000

Summary of Increases and Decreases

	Base for 1975	(+) (-) Increase Decrease 1975	
Petroleum Allocation Program	$ 23,800,000	(+) 33,400,000	(+) 33,400,000
Coordination of Oil & Gas Activities	2,330,000	(+) 570,000	(+) 570,000
Contingency Funding for State & Federal Energy Shortage Programs	10,000,000	---	---
Net Increase, 1975			(+) 33,970,000
Budget Estimate, 1975			$ 70,100,000

FUEL ALLOCATION, OIL AND GAS PROGRAMS EXHIBIT 2

Analysis by Activities

Activity	F.Y. 1973 Amount Available	F.Y. 1973 Total Appropriation	F.Y. 1974 Transfers	F.Y. 1974 Amount Available
1. Petroleum allocation program	---	1,100,000	---	23,800,000
2. Coordination of oil and gas activities. . .	1,483,138	1,547,000	---	2,330,000
3. Contingency funding for State and federal energy shortage programs . . .	---	---	---	10,000,000
Unobligated balance lapsing	1,862	---	---	---
Total	1,485,000	2,647,000	---	36,130,000

FUEL ALLOCATION, OIL AND GAS PROGRAMS

EXHIBIT 3

	Fiscal Year 1973 Amount Available	Fiscal Year 1974 Amount Available	Fiscal Year 1975 Estimate	Increase (+) or Decrease (-) 1975 compared with 1974 Total
1. Petroleum allocation program	---	23,800,000	57,200,000	(+) 33,400,000
2. Coordination of oil and gas activities	1,483,138	2,330,000	2,900,000	(+) 570,000
3. Contingency funding for state and federal energy shortage programs	---	10,000,000	10,000,000	---
Unobligated balance lapsing	-1,862	---	---	---
Total	1,485,000	36,130,000	70,100,000	(+) 33,970,000

Fuel Allocation Program

JUSTIFICATION

Fuel Allocation Program: Fiscal Year 1974, $23,800,000; Fiscal Year 1975, $57,200,000; increase $33,400,000. The increase consists of:

Increase (+) Amount	Positions	Total Program	Total Positions	Explanation
(+) $33,400,000	- - 1/	$57,200,000	2,107	Annualization of program funding and staffing increase provided by FY 1974 Supplemental Appropriations Act for Petroleum Allocation Program (including Compliance and Enforcement activity. See note 1/).
(+) $33,400,000	- - 1/			

1/ 1,107 Positions are allotted to this appropriation for the Fuel Allocation Program for FY 1974. Concurrently with this FY 1975 budget request, a second FY 1974 supplemental appropriation is being requested for $18,000,000 - $8,000,000 for Printing and Distribution of Ration Coupons and $10,000,000 and 1,000 positions to be transferred to IRS to cover the costs of the compliance and Enforcement activity. On July 1 these personnel are to be transferred to the Office of Petroleum Allocation bringing the personnel total to 2,107. This FY 1974 supplemental request is not included in the FY 1974 base amount.

The Fuel Allocation Program

Need for Increase:

The program increase requested provides for full year funding of the fuel allocation program, including staffing at 10 Regional Offices and Liaison Offices in the States and territories.

This program, which began as the Voluntary Petroleum Allocation Program, was first funded in FY 1974 with an appropriation of $1,100,000 and 50 positions, and has grown rapidly in response to the changing energy situation. During late summer and early fall of 1973, as it became apparent that there would be shortages of certain fuels, two mandatory allocation programs were established, one for propane and the other for middle distillates, supplementing the voluntary program for all other fuels. Supplemental FY 1974 funding was requested in the amount of $10,270,000 and 387 additional positions, and a Petroleum Allocation Division was created within the Office of Oil and Gas to be staffed temporarily with personnel detailed from other agencies in the Department of the Interior.

By November, as the energy situation worsened due to the Middle East conflict, additional steps became necessary. A separate Office of Petroleum Allocation was created within the Department of the Interior, a larger staff of temporary personnel was requested to be detailed from agencies outside of Interior, and the request for FY 1974 supplemental funding was increased to a total amount of $22,981,000 and 1,057 positions under this appropriation.

In December the Federal Energy Office (FEO) was created in the Executive Office of the President to provide policy direction to the many Federal energy activities. The Office of Petroleum Allocation is now receiving policy direction from the FEO although it continues to be an Interior Office operating under Interior authorities and appropriations.

After the enactment of the FY 1974 Supplemental Appropriation, a further requirement for 1,000 positions and $18,000,000 was identified for compliance and enforcement activities and for printing of three month's supply of gasoline rationing coupons as a contingency against a possible rationing program. To fund this requirement, a second FY 1974 supplemental is being transmitted concurrently with this FY 1975 budget request.

This FY 1975 request includes an amount for full year funding of the compliance and enforcement activity but does not include any additional funding for any gasoline rationing program or activity.

The objectives of the Fuel Allocation Program are:

1. To provide for the equitable distribution of Petroleum products to all areas and economic sectors of the country at equitable prices;

2. To develop and publish rules and regulations which will accomplish the first objective;

3. To provide a mechanism permitting necessary adjustments in fuel allocation amounts in cases of hardship, economic growth, administrative oversight, or changing supply conditions;

4. To provide a mechanism for appealing rules, regulations, orders, rulings, policies, or decisions which adversely affect any individual, company, industry, or other group;

5. To provide the means to investigate complaints and suspected violations of prices or allocations of petroleum or petroleum products on the part of producers, suppliers, distributors, or end-users, and to enforce compliance with regulations and policy orders of the FEO, including, where necessary, imposing fines and other legal sanctions for such violations;

6. To review and analyze the impact of allocation policies and regulations on the national economy and on particular industries or localities, to assure the minimum disruption of the market mechanism due to these policies, regulations, and prices, and to maintain a healthy and competitive status to the independent sector of the petroleum industry;

7. To help the States in carrying out their responsibilities under the fuel allocation regulations including the administration of the State set-aside or reserve for emergencies and hardships.

The fuel allocation regulations are divided into the following separate programs:

1. Crude Oil
2. Refinery Yield
3. Petrochemical Feedstocks
4. Other Products

5. Butane
6. Aviation Fuels - Civil Air Carriers
7. Residual Fuel - Electric Utilities and Maritime Bunker Fuel
8. Aviation Fuels - General Aviation
9. Residual Fuels - Other than Utilities and Maritime Bunker Fuel
10. Motor Gasoline
11. Propane
12. Middle Distillates

Every state and the District of Columbia, Guam, American Samoa, Puerto Rico, and the Virgin Islands - 55 in all - are authorized to administer portions of the programs administered in the field in particular the state set-aside and requests for hardship consideration. At present, only Puerto Rico has not requested the necessary certification to administer these programs.

The activities of the Office of Petroleum Allocation consist of:

1. Collection, processing and analysis of data on the location amounts and use of crude petroleum and refined petroleum products. Every importer, refiner, supplier, wholesaler and wholesale purchaser is required to submit reports or forms at stated intervals on the amounts of petroleum and refined products he refines, supplies, sells or uses. To handle this very large amount of data, an information processing system has been designed and initial implementation undertaken. This system will permit the fuels managers to know the amounts and location of the different petroleum products, so they can make informed allocation judgments. The same computer-based system will keep track of the status of specific allocation problems, with a central processing unit and terminals in each of the Regional Offices.

2. Analysis, review, and interpretation of questions about allocation policies and regulations; development and coordination of interpretations and revisions to the regulations, development of program and implementation plans, and review, analysis and adjudication of appeals and requests for exemptions to orders or regulations of the FEO on fuel allocation.

3. Reception and resolution of specific allocation problems which are primarily industry-wide rather than a specific fuel, and coordination with Fuels Managers and Regional Office staffs in the solution of these problems, operation of quick response telephone and "walk-in" inquiry office and a trucking industry "hotline" 24 hour telephone.

4. The overall management of crude oil and refinery yield programs and all refined petroleum products, and the allocation of those petroleum products for which allocation responsibility is not delegated to the field, i.e., Petrochemical feedstocks, butane, aviation fuels for civil air carriers, utility and marine bunker residual fuels, and other products.

5. The investigation of all cases of reported or suspected violations of fuel allocation and fuel price regulations and the routine and special audit for accuracy of records and verification of physical inventory of petroleum product refiners, suppliers, wholesalers, dealers, etc.

6. The receipt, classification, routing and distribution of the very large volume of incoming mail and telegraphic correspondence, preparation and dispatch of replies to routine correspondence, and the operation of telephone and telegraph communications and reproduction services, and other administrative support services.

7. The design, development, and preparation of training programs and manuals for Petroleum Allocation personnel in Washington, Regional and State Offices, industry and trade associations, and providing training to Washington staff and field training staff.

8. Administration of an intergovernmental affairs program including liaison with elected officials and their energy and fuel allocation staffs at State and local governmental levels, establishment of a technical assistance program to State and local governments, administration of a grant-in-aid program (when legislatively authorized) to States for administration of their responsibilities under the petroleum allocation regulations.

9. Coordination of and supporting assistance to the Regional Administrators and their staffs in carrying out the allocation program in the field including: maintaining daily contact with the Regional Offices on policy and management decisions to be made at Headquarters; and implementing uniform and rapid operational and communications procedures between Headquarters and Regional Offices, establishing priorities for and taking those actions necessary to expedite decisions either in Washington or the field.

Program Accomplishments

Regulations - The first regulations, for the Voluntary Petroleum Allocation Program, were published in May of 1973. The Mandatory Propane Allocation Regulation was published in mid-October and the Mandatory Middle Distillate program Regulations, November 1, 1973. All of these were published by the Energy Policy Office under the authority of the Economic Stabilization Act (as amended). During November the Middle Distillate Program Regulations were revised and published for public comment and preparations were underway to revise the Propane Program Regulations. However, in late November the Emergency Petroleum Allocation Act became law, requiring the allocation of all petroleum products and crude oil, and superseding all of the existing and proposed revised regulations. Under this legislation draft regulations were published for public comment on December 13 and the revised final regulations published January 15. During this entire period of drafting, reviewing, publishing, revising, implementing and operating these regulations and programs, the program was staffed by temporary and detailed personnel.

Training - Since the inception of the program training has been provided to make Federal and State Fuel Allocation Personnel, petroleum industry personnel, and the affected public, aware of the nature of and changes or proposed changes in the program. The first conference and training session for allocation personnel from every State was held in early November 1973. Since the establishment of Regional Offices, frequent conferences and training sessions (at least once or twice a month) have been held for Regional Directors and their key staff. Major activities have been to:

1. design a training course and manual and conduct a 3-day training conference and workshop for key Regional Staff (including a Regional Training Officer) covering the new regulations and program (January 11-13);

2. develop training manuals, materials, and courses for Regional Training Programs and for training of Agricultural Stabilization and Conservation Service and Post Office staffs, and petroleum industry personnel;

3. hold in each Region, a training course duplicating (1) above for Regional and Staff Office Personnel (January 14-15);

4. hold numerous training sessions, conferences, briefings, and orientation programs for various industry groups and petroleum allocation staff.

Over 6,500 personnel attended the above training activities during January.

State Assistance - A wide variety of activities to assist the States in carrying out their responsibilities in the Allocation program have been initiated. This has included working closely with (on a daily basis) representatives of the National Governors Conference, the Council of State Governments, the Conference of Mayors and the League of Cities, and the National Association of Counties. Through the use of the Intergovernmental Personnel Act, trained personnel from these organizations have been added to the Program, both to work with their organizations, and to represent their views directly to the FEO.

To assist the States in getting ready to carry out their reponsibilities under the new regulations, the Program assisted in the development and performance of the training program for State personnel and in the development of program implementation manuals. Several planning Conferences have been held with State and local government personnel to develop additional programs for training and technical assistance for State allocation personnel. Each Regional Office has designated a senior staff member to perform Intergovernmental liaison and coordination activities, and these personnel have and will continue to play a key part in providing direct communications and assistance to the States.

In addition to the above types of assistance a program was developed to provide technical or professional assistance on a consulting basis as needed and requested by the States. An interim amount of $7,500 per state has been made available to provide quick response assistance to State allocation offices on specific operational problems, such as a system for keeping track of incoming cases, fuel inventories, hardships, etc. Plans are being prepared for making grants-in-aid to the States for allocation programs, from appropriated Contingency Funds when legislative authority permits.

JUSTIFICATION

Coordination of Oil and Gas Activities: Fiscal Year 1974 $2,330,000, fiscal year 1975 $2,900,000; increase $570,000. The increase consists of:

Increase (+) Amount	Increase (+) Positions	Total Program	Total Positions	Explanation
(+) $570,000	- -	$2,900,000	118	Annualization of program funding and staffing increases provided by Supplemental Appropriations Act of 1974

(+) $570,000

Responsibilities of the Office of Oil and Gas

In providing staff support on oil and gas matters to the Secretary and the Assistant Secretary -- Energy and Minerals, the Office of Oil and Gas has four major functions: (1) to act as the principal line of communications between the Federal Government and private industry on matters relating to petroleum; (2) to insure that the responsibilities of the Department of the Interior for emergency preparedness in oil and gas are appropriately fulfilled; (3) to carry out the Department's responsibilities in the Oil Import Program; (4) to carry out the Department's responsibilities for the Petroleum Allocation Program. To be more responsive in functional program areas, this Office is now organized into five divisions: Programs and Analysis, Emergency Preparedness, Oil Imports, Petroleum Allocation, and the Management and Budget.

The Office of Oil and Gas, within the Federal establishment, provides leadership and coordination for all oil and gas matters, advice and assistance to Federal agencies and international organizations on all phases of petroleum and gas, and serves as the principal channel of communication between the Federal Government and the petroleum, gas, petrochemical, allied industries, as well as the Interstate Oil Compact Commission and State oil and gas regulatory agencies.

Domestic and International studies are made on adequacy of petroleum and gas, to define deficient areas or elements, and to develop ways to alleviate actual or potential deficiencies. The preparation of national emergency plans and development of oil and gas preparedness programs, and the recruitment, training, and assignment of 600 Defense Executive Reservists for the Emergency Petroleum and Gas Administration are assigned responsibilities of this office. Advice, assistance, and studies on a wide range of oil and gas matters are continually provided the Secretary of the Interior, the Congress, its Committees, the Departments of State, Commerce, and Defense, the (GSA) Office of Pre-

paredness, Defense Civil Preparedness Agency, the Cabinet-level Oil Policy Committee, the new Federal Energy Office, and other Federal agencies concerned with petroleum and gas and the supply thereof.

The office prepares analyses and evaluation of petroleum and gas supply and demand data from Federal, state, and industry sources. Federal sources include the U. S. Geological Survey, Bureau of Mines, Department of Commerce, Department of Transportation, Federal Power Commission, Interstate Commerce Commission, and any agency developing, maintaining, and publishing data bearing on petroleum and gas supply. State sources include the Interstate Oil Compact Commission and the oil and gas regulatory agencies of producing states. Industry sources include information published by advisory committees to the Secretary of the Interior, such as the National Petroleum Council, and the Emergency Advisory Committee for Natural Gas, and oil and gas trade associations and direct contact with the executive and technical personnel in the oil and gas industries.

Program and Activities

The Office of Oil and Gas is one of the activities under the direction of the Assistant Secretary for Energy and Minerals. Major program areas are as follows:

I. Programs and Analysis Program

As a continuing function in support of Departmental Energy and Resource programs, the Office conducts a wide variety of staff studies on the related aspects of the domestic and international oil and gas industries. These studies have a wide variety of form, but all in essence are related to the security of energy supplies, utilizing analysis of information and staff expertise, on the adequacy of oil and gas to meet current and future demand, the definition of deficient areas and the development of courses of action to alleviate real or potential supply crises. The office maintains an active exchange of information with the industry sector through the National Petroleum Council, two industry advisory groups for the Secretary, and the Emergency Advisory Committee for Natural gas. Exchanges of information are conducted with the various oil producing states and related groups, consumer and environmental protection groups, the academic world, the general public, and other Federal, regional and state government offices and activities.

II. Emergency Preparedness Program

In responding fully to these major functions, the Office of Oil and Gas undertakes a variety of tasks, including the preparation of national emergency plans and the development of oil and gas preparedness programs, the latter involving the recruitment, training and assignment of some 600 Defense Executive Reservists for the Emergency Petroleum and Gas Administration, a standby control organization which would mobilize this nation's oil and gas resources in the event of a national emergency. The Office assumes a major role in planning and the recruitment.

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Should an emergency develop which affects foreign oil supply, the Office of Oil and Gas, in coordination with other interested departments and agencies, provides leadership within the Federal Government in its relationships with the oil industry through the Foreign Petroleum Supply Committee and its several subordinate committees including the Emergency Petroleum Supply Committee which was reactivated in November 1973. As part of this leadership, the Office, in collaboration with other Federal agencies, investigates on a continuing basis essential civilian and industrial emergency requirements for oil, and prepares studies on the capabilities and facilities available in the Free World to produce, refine, store and transport oil and gas under peacetime, emergency, conventional or nuclear war conditions.

III. Oil Import Program

The Oil Import (regulatory) program is designed to insure a stable and healthy oil industry in the United States capable of exploring for and developing new petroleum reserves to replace those being depleted, by reserving a share of the domestic market for domestic oil producers, refiners and marketers. The basis of the program is the certified requirements of our national security which make it necessary that we preserve to the greatest extent possible a vigorous and healthy petroleum industry in the United States capable of supplying the essential and continuing petroleum requirements of the United States.

IV. The Oil Import Compliance Program

The oil import program is now resulting in the collection, by the Office of Oil and Gas, of a substantial amount of fees estimated at an annual rate of about $100 million. It is important, therefore, to have an auditing and compliance-inspection activity to ensure proper performance by all parties concerned. This involves technical inspections in the field and correlation of observations with records being maintained by industry and government activities.

V. The Management and Budget Division Activities

The Office of Oil and Gas was expanded substantially in fiscal year 1974 to carry out an expanded scope of activities in critical fuel-supply areas. This expansion occurred both in Washington and in the field. New emphasis must be placed, in fiscal year 1975, on effective management and efficient use of appropriated funds.

VI. Special Programs - Continuing Studies and Projects

On an international scale, the Office of Oil and Gas plays an important planning and advisory role with respect to possible allocation programs for petroleum. During FY 1974, a representative of the Office served as chairman of an ad hoc working group of the Organization of Economic Cooperation and Development (OECD) dealing with questions of petroleum supply interruption. Similarly, this representative chaired a working group of the National Security Council charged with formulating U. S. policy on the same question. Activities of this sort are expected to be continued and intensified during fiscal year 1975.

Various aspects of oil imports into the United States and their relation to our national security, the balance of payments problems, the abatement of air and water pollution and improvement of the environment will continue to be studied in fiscal year 1975.

VII. Annualization of program funding and staffing provided by Supplemental Appropriation Act of 1974

The Supplemental Appropriation Act of 1974 provided for 118 permanent positions and additional funding of $845,000 for increased program costs of the Office of Oil and Gas. Annualization of these staffing and funding increases requires $570,000 to provide for twelve (12) months of uninterrupted operations, communications, services and other support for the program during this period of energy shortages and national and international petroleum problems. Attention is invited to the fact that this requested increase is only for continuity of programs (annualization).

VIII. FY '75 Annualization of G.S.A. Space Costs

FY '75 reimbursement to General Services Administration is required for space costs, federally owned and leased real property used by the Office of Oil and Gas. The proposed increase provides for the anticipated costs of such real property at the Department of the Interior Headquarters Building; separately located federally owned or leased property in Washington, D. C., which is provided for the Petroleum Allocation Division and in federally owned or leased property in twelve (12) field locations. Funds requested include $1 million allocated to petroleum allocation endeavors and the balance to other Office of Oil and Gas activities.

Funding for '75 includes $1,099,000 (1 million for petroleum allocation, $99 thousand for OOG).

Summary

The Office of Oil and Gas is directly concerned with efforts to conserve the energy resources of the nation, while assuring that user demands are met to the fullest extent, consistent with national security considerations, and at costs responsive to both producer and consumer needs. Today, this concern has to be met in the context of requirements for increased imports; a growing concern for the environment and protection of those resources still in the ground; political and economic instability in many producting areas overseas; expanding consumer concern over the prices for fuels; and area, regional and national shortages of oil and gas raw materials.

Contingency Funding for State and Federal Energy Shortage Programs

JUSTIFICATION

Contingency Funding for State and Federal Energy Shortage Programs: Fiscal Year 1974, $10,000,000; Fiscal Year 1975, $10,000,000; No increase.

During consideration of the request for FY1974 supplemental funding for the Fuel Allocation Program, there was general agreement that the appropriation of a contingent reserve fund would be a sensible approach to preparing for the uncertainties associated with developing energy shortages and potential new responsibilities under pending legislation (including uncertainties associated with gasoline rationing). To enable the Fuel Allocation Program to be able to respond to an unforeseen and urgent requirement quickly, and without having to wait for the normal process of a supplemental budget request, the Congress approved a contingency fund of $10,000,000. This contingency fund was specified by the Congress to be subject to three conditions:

1. That its use be contingent upon the enactment of Senate Bill 2589 or similar legislation.

2. One-half, or $5,000,000 to be used for a State grant program. The remaining $5,000,000 to be for implementation of other emergency energy programs authorized by such legislation.

3. That review and approval of House and Senate Appropriations Committees be obtained before using any of these funds

Neither Senate Bill 2589 nor "similar legislation", as of the time of preparation of this request, has yet been enacted, thus these funds have not been used. It is anticipated that such legislation will be enacted well before the end of Fiscal Year 1974 and that the legislation will include the necessary authorization to make grants to States to permit the funds to be used for that purpose. When enacted, the Fuel Allocation Program will request approval of both Appropriations Committees for a State Grant program, with other requests to the Committees, if any, being contingent upon whatever requirements are established by the legislation..

2.

For Fiscal Year 1975 a similar line-item is being included in this request for a $10,000,000 Contingency Fund, which is intended to serve the same "stand-by" or emergency purpose of being available for unanticipated requirements for which the need would arise too fast for the normal appropriation or supplemental appropriation process. It is proposed that the Contingency Fund be subject to prior Appropriations Committee approval as at present, but that the limitation making the availability of funds contingent upon passage of Senate Bill 2589 or similar legislation (unless it has not been enacted by the time the Appropriation Committees take action) be withdrawn or modified to make the limitation more general, e.g., "requirements imposed by new legislation or unforeseen emergencies." Since the Petroleum Allocation Program budget request for Fiscal Year 1975 includes an amount for a planned State Grant Program, the limitation that $5,000,000 be used for that purpose appears unnecessary.

FUEL ALLOCATION, OIL AND GAS PROGRAMS

PERSONNEL SUMMARY

	Actual 1973	Estimate 1974	Estimate 1975
Total number of permanent positions	67	1,200	2,135
Full-time equivalent of other positions .	6	25	90
Average paid employee	65	831	2,035
Average GS grade	10.4	8.7	8.7
Average GS salary	$17,916	$14,731	$14,731

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) or Decrease (-)
Direct Obligations by Objects:				
11 Personnel compensation	$1,037	$10,200	$33,100	$22,900
12 Personnel benefits	88	1,000	1,900	900
13 Benefits for former personnel	6	--	--	--
21 Travel & transportation of persons	90	1,000	2,700	1,700
22 Transportation of things	2	500	500	--
23 Rent, communications, and utilities	62	1,500	2,800	1,300
24 Printing and reproduction	60	700	1,500	800
25 Other services	99	13,700	18,400	4,700
26 Supplies and materials	19	650	1,200	550
31 Equipment	20	1,880	3,000	1,120
41 Grants, subsidies, and contributions	--	5,000	5,000	--
Total direct obligations	$1,483	$36,130	$70,100	$33,970

Office of Coal Research

PROGRAM JUSTIFICATION

Fiscal Year 1975

Salaries and Expenses: Fiscal Year 1974, $123,400,000; Fiscal Year 1975, $283,400,000; increase, $160,000,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $ +4,163,000	+112	$ 6,563,000	222	To augment necessary staff to administer and monitor contract research program.
(2) $+155,837,000	--	$276,837,000	--	Increase in contract research program for ongoing projects and new projects.
$+160,000,000	+112	$283,400,000	222	

Cost Factors Involved in the Increase

(1) The increase of $4,163,000 for administration and supervision of the contract research involves an increase of one hundred twelve (112) employees. This will increase the total staff to two hundred twenty-two (222) employees. These additional employees are the minimum number necessary to meet the requirements of the greatly expanded technical and administrative program. It is estimated that this increased staff will enable proper monitoring of contractors' performance and activities. (The increase is also required for the extensive additional workload entailed in coordinating the expanded program of anticipated additional cosponsored funding of the accelerated projects.) The projects will be in critical stages of construction and operation, making it vital to perform adequate monitoring of contract work. There will be additional travel during FY-1975 required by OCR technical employees in the performance of these projects, and for supporting staff cost requirements.

The revised amount ($6,563,000) proposed for administration and supervision represents approximately 2.3 percent of the recommended program.

(2) To provide an increase of $155,837,000 for accelerated contract research for conversion of coal to liquid fuels, high-B.t.u. pipeline gas, and low-B.t.u. gas/power; for clean efficient conversion of coal to electricity by advanced power systems, and improved combustion; and related support research and extraction and reclamation technology. The additional funds are required for FY-1975 to enable these vital clean energy objectives to achieve technological and economic feasibility with the promptness demanded by the nation's problems of clean energy supply.

	FY-1974	FY-1975
	($ 000)	
A. Program increases requested:		
Coal Liquefaction	$ 43,500	$ 79,600
High-B.t.u. Gasification	25,400	37,800
Low-B.t.u. Gas/Power	19,700	49,000
Advanced Power Systems (MHD, etc.)	9,600	12,700
Direct Boiler Combustion	14,200	34,000
Advanced Research & Supporting Technology	6,100	19,137
"Pioneer Plant" Projects	--	42,100
Systems Studies	2,500	2,500
B. Increase requested for:		
Administration and Supervision	2,400	6,563
	$123,400	$283,400

A summary of OCR's programs for Fiscal Years 1974 and 1975 follows:

	FY 1974	Requested Increase	FY 1975	Estimated Industry Contribution
Pilot Plant Projects..	$89,250,000	$81,950,000	$171,200,000	$52,350,000
Non-Pilot Plant Proj..	31,750,000	31,787,000	63,537,000	6,300,000
*Demonstration and Larger Plants.....	--	42,100,000	42,100,000	42,100,000
Administration and Supervision	2,400,000	4,163,000	6,563,000	--
Total	$123,400,000	$160,000,000	$283,400,000	$100,750,000

The Office of Coal Research continues to work closely with its General Technical Advisory Committee (GTAC), a distinguished, able, and technically qualified group of advisers drawn from industry, science, education, and labor, and appointed by the Secretary of the Interior. This group, as well as other non-Governmental technical consultants, assists in the review of ongoing work and new work. The budget for FY 1975 reflects detailed discussions with the GTAC relative to individual projects as well as areas of research effort for the proposed areas of work to be covered.

* "Pioneer Plant" Program

Summary Energy Research and Development Analysis 1/
Mines and Minerals
($ millions)

Activity Project or Program	FY 1974 Amount Available	FY 1975 Regular Budget	FY 1975 Budget Amendment H.D.	FY 1975 Total Request	Increase (+) or Decrease (-) 1975 Compared with 1974
Salaries and Expenses:					
Coal Liquefaction	$ 43.5	$ 51.00	$ 28.60	$ 79.60	$ +36.10
High-B.t.u. Gasification	25.4	24.70	13.10	37.80	+12.40
Low-B.t.u. Gas/Power	19.7	29.00	20.00	49.00	+29.30
Advanced Power Systems	9.6	5.25	7.45	12.70	+ 3.10
Director Boiler Combustion	14.2	19.70	14.30	34.00	+19.80
"Pioneer Plant" Program	--	--	42.10	42.10	+42.10
Advanced Research & Supporting Technology and Systems Studies	8.6	2.40	19.24	21.64	+13.04
Administration and Supervision	2.4	2.95	3.61	6.56	+ 4.16
Subtotal, Energy R&D	$123.4	$135.00	$148.40	$283.40	$ +160.00
All Other Activities	--	--	--	--	--
Total, Mines and Minerals	$123.4	$135.00	$148.40	$283.40	$ +160.00

1/ This table shows the relation of the FY 1975 budget amendment for the accelerated energy R&D program to the FY 1975 regular budget request and the FY 1974 amount available.

SALARIES AND EXPENSES

Appropriation, 1973		$ 43,490,000	
Unobligated balance from prior year		803,000	
Total available, 1973			$ 44,293,000
Appropriation, 1974	$ 94,300,000		
Supplemental Appropriation, 1974	29,100,000		
Total Appropriation, 1974		123,400,000	
Unobligated balance from prior year		1,379,000	
Total Available, 1974			124,779,000

SUMMARY OF INCREASES AND DECREASES, 1975

	Base for 1975	Increase 1975	
Increase to provide necessary staff to administer and monitor expanded contract research program--both Federally and non-Governmentally funded portions	$ 2,400,000	$ 4,163,000	
Increase in contract research program ...	122,379,000	154,458,000	
Net Increase, 1975			158,621,000
Budget Estimate, 1975			$283,400,000

SALARIES AND EXPENSES

Analysis by Activity

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Total Appropriation	F.Y. 1974 Unobligated Balance	F.Y. 1974 Adjusted Amount Available
Administration and Contract Supervision.....	$ 885,000	$ 2,400,000	$ -	$ 2,400,000
Contract Research.....	42,605,000	121,000,000	1,379,000	122,379,000
Unobligated Balance	803,000	-	-	-
Total	$44,293,000	$123,400,000	$ 1,379,000	$124,779,000

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) Decrease (-) 1975 comp. with 1974
Administration and Contract Supervision.....	$ 885,000	$ 2,400,000	$ 6,563,000	$ +4,163,000
Contract Research	42,605,000	122,379,000	276,837,000	+154,458,000
Unobligated Balance	803,000	-	-	-
Total	$44,293,000	$124,779,000	$283,400,000	$ +158,621,000

SUMMARY OF PROPOSED PROGRAMS FOR FY 1975
(in millions of dollars)

	Approp. FY 1974	Estimated FY 1975 Federal Funds	Estimated FY 1975 Cosponsor Funds (assumed)
I. Coal Liquefaction			
A. Pilot Plant Projects	$ 37.05	$ 60.600	$ 17.00
B. Non-pilot Plant Projects	6.45	19.000	2.00
Total	43.50	79.600	19.00
II. High-B.t.u. Gasification			
A. Pilot Plant Projects	20.00	31.800	10.00
B. Non-pilot Plant Projects	5.40	6.000	-
Total	25.40	37.800	10.00
III. Low-B.t.u. Gas/Power			
A. Pilot Plant Projects	19.20	46.000	13.60
B. Non-pilot Plant Projects	.50	3.000	.80
Total	19.70	49.000	14.40
IV. Advanced Electric Power Systems			
A. Pilot Plant Projects	-	-	-
B. Non-pilot Plant Projects	9.60	12.700	1.50
Total	9.60	12.700	1.50
V. Direct Boiler Combustion			
A. Pilot Plant Projects	13.00	32.800	11.75
B. Non-pilot Plant Projects	1.20	1.200	-
Total	14.20	34.000	11.75
VI. Advanced Research & Supporting Technology			
A. Pilot Plant Projects	-	-	-
B. Non-pilot Plant Projects	6.10	19.137	2.00
Total	6.10	19.137	2.00
VII. Systems Studies			
A. Pilot Plant Projects	-	-	-
B. Non-pilot Plant Projects	2.50	2.500	-
Total	2.50	2.500	-
VIII. "Pioneer Plant" Projects			
A. Pilot Plant Projects	-	-	-
B. Non-pilot Plant Projects	-	-	-
C. Demonstration and Larger Projects	-	42.100	42.10
Total	-	42.100	42.10
Total Pilot Plant Projects	89.25	171.200	52.35
Total Non-pilot Plant Projects	31.75	63.537	6.30
Total Demonstration and Larger Projects	-	42.100	42.10
Administration and Supervision	2.40	6.563	-
TOTAL	$123.40	$283.400	$100.75

	PROGRAM	Based on Federal Approp. for FY 74	Est. for FY 1975 Federal Funds	Est. for FY 1975 Cosponsor Funds
			(millions)	
I.	Coal Liquefaction			
A.	Pilot Plant Projects			
	1. Direct Hydrogenation Projects	$ 8.00	$13.00	$ 6.50
*	a. Ebullated Bed Prototype			
*	b. Fluidized Bed Hydro Reactor			
	2. Solvent Extraction Based Projects	12.55	9.00	1.50
	a. Solvent Refined Coal			
*	b. Delayed Coking			
	3. Carbonization Projects	4.50	10.60	3.50
*	a. Clean Coke			
	b. COED			
	c. Low-temperature Carbonization			
	*4. Fischer-Tropsch Variations	2.00	7.00	3.50
	5. Design of Prototype Plants	7.00	17.00	--
	*6. Equipment and Materials Development	3.00	4.00	2.00
	Total Pilot Plant Projects	$37.05	$60.60	$17.00
B.	Non-Pilot Plant Projects			
	1. New Processes	$ 1.65	$ 6.30	$ 1.75
*	a. Zinc Chloride Catalyst PDU			
	b. Centrifugal Hydro-Reactor			
*	c. Chemicals from Coal			
*	d. Methanol/Liquid Catalysts			
+	e. Nuclear Waste Heat for Processing			
	2. Engineering Support Projects	2.10	8.20	--
	a. Engineering Evaluations			
	b. Cost Estimate			
	c. Liquefaction Data Book			
	d. Heat Exchanger			
	e. Liquid Pipelining			
	f. Characterization of Liquid Fuels			
	3. Other Support Projects	1.70	4.50	.25
+	a. Special Coals			
+	b. Lignite Liquefaction			
+	c. Western Coals Adaptation			
+	d. Desulfurization			
	e. "COG" Research			
	f. Other			
	Total Non-Pilot Plant Projects	$ 6.45	$19.00	$ 2.00
	Total Coal Liquefaction	$43.50	$79.60	$19.00

* Cosponsorship estimated at 1/3 of total costs and fees.
+ Estimated cosponsorship at reduced percentages.

	PROGRAM	Based on Federal Approp. for FY-74	Est. for FY-1975 Federal Funds	Est. for FY-1975 Cosponsor Funds
			(millions)	
II.	High-B.t.u. Gasification			
	A. Pilot Plant Program (with A.G.A.)			
+	Three Pilot Plants	$12.99	$18.20	
+	Six Supporting Projects	7.01	13.60	
	Total Pilot Plant Program	$20.00	$31.80	$10.00
	B. Non-Pilot Support Projects	5.40	6.00	--
	Total High-B.t.u. Gasification ...	$25.40	$37.80	$10.00
III.	Clean Low-B.t.u. Gas			
	A. Pilot Plant Projects (Gasifiers)			
	1. Atmospheric	3.00	15.00	3.00
*	a. Entrained Bed			
*	b. Suspension Bed			
	c. Stirred Fixed Bed			
	d. Three-stage Fluidized Bed			
	e. Two-stage Circular Grate/Fixed Bed			
	2. Pressurized	16.20	31.00	10.60
*	a. Entrained Bed			
*	b. Fluidized Bed			
+	c. Molten Salt			
	d. Fluidized Bed Stirred			
	e. Slurry Firing with Cleanup			
+	f. Agglomerating Bed			
	Total Pilot Plant Projects ..	$19.20	$46.00	$13.60
	B. Non-Pilot Plant Projects			
	1. Cleanup	.40	2.00	.80
*	a. High-Temperature with Molten Salt			
+	b. High Tmperature with Dolomite			
	2. Engineering Evaluations	.10	1.00	--
	Total Non-Pilot Plant Projects	.50	3.00	.80
	Total Low-B.t.u. Gas. Projects	$19.70	$49.00	$14.40

* Cosponsorship estimated at 1/3 of total costs and fees.
+ Estimated cosponsorship at reduced percentages.

	PROGRAM	Based on Federal Approp. for FY-74	Est. for FY-1975 Federal Funds	Est. for FY-1975 Cosponsor Funds
			(millions)	
IV.	Advanced Power Systems			
	A. Pilot Plant Projects			
	None			
	B. Non-Pilot Plant Projects			
+	1. MHD	$ 7.45	$7.50	$1.00
+	2. Other Advanced Power	1.85	3.90	.50
	a. Alkali Metal Topping			
	b. Closed Brayton Cycle			
	c. High-Temperature Fuel Cell			
	3. Engineering Evaluations and Supporting Research	.30	1.30	--
	Total Advanced Power Systems	$ 9.60	$12.70	$1.50
V.	Direct Boiler Combustion			
	A. Pilot Plant Projects			
	1. Atmospheric	8.20	15.50	6.00
*	a. Fluidized Bed Boiler, 30 MW			
*	b. Fluidized Bed Boiler Demo, 800 MW			
	2. Pressurized	4.80	17.30	5.75
*	a. Fluidized Bed Boiler, Steam Drive, 30-70 MW			
	b. Fluidized Bed Boiler, Hot Air Drive, 3 MW			
+	c. Fluidized Bed Boiler, Advance Power Cycle			
*	d. Fluidized Bed Boiler, Demo-Commercial, 500 MW			
	B. Non-Pilot Plant Projects			
	Lab and Process Development Unit Research	1.20	1.20	--
	Total Direct Combustion	$14.20	$34.00	$11.75

* - Cosponsorship estimated for 1/3 of total costs and fees.

+ - Estimated cosponsorship at reduced percentages.

	PROGRAM	Based on Federal Approp. for FY 74	Est. for FY 1975 Federal Funds	Est. for FY 1975 Cosponsor Funds
			(millions)	
VI.	Advanced Research & Supporting Technology			
	A. Pilot Plant Projects			
	None			
	B. Non-Pilot Plant Projects			
+	1. Advanced Coal Conversion Processes	$ 4.50	$13.887	$ 2.00
	2. Advanced Utilization Processes; Electric Power Production; and Supporting Research	1.60	5.250	--
	Total Advanced Research and Supporting Technology	$ 6.10	$19.137	$ 2.00
VII.	Systems Studies			
	A. Pilot Plant Projects			
	None			
	B. Non-Pilot Plant Projects	$ 2.50	$ 2.50	--
	Total Systems Studies	$ 2.50	$ 2.50	--
VIII.	"Pioneer Plant" Projects			
	A. Pilot Plant Projects			
	None			
	B. Non-Pilot Plant Projects			
	None			
x	C. Demonstration Size or Larger	--	$42.10	$42.10
	Total "Pioneer Plant" Project	--	$42.10	$42.10

+ Estimated cosponsorhip at reduced percentages.
x Cosponsorship equal to Federal funding.

BACKGROUND AND OVERALL STRATEGY

I. Background

Coal is our most abundant domestic fuel resource. Because of many factors, the country now has no alternative but to accelerate its investment in making coal available as a major energy source. Because of the limited domestic supplies of oil and gas and the insecurity of supplies of imported oil and gas, coal-derived products are necessary to make up for the deficiencies projected in oil and gas supply for the remainder of this century. Because of delays in bringing nuclear electric plants on line, increasing quantities of coal or coal-derived products will be needed for electric utility and industrial boilers. But coal or coal products must be used in ways which are environmentally acceptable. The knowledge base on most aspects of the process from resource extraction to end use is not adequate for the coal industry in all its parts to meet the challenge before it.

II. Long-Term Objective of Coal R&D Strategy

The long-term objective of the coal R&D program is to make coal-derived fuels available in whatever form the market place needs them (i.e., chemical feedstock, various types of gases and liquids, as well as a clean solid suitable for direct use). In many ways, what has to be done can be compared to what has been done in the petroleum industry. For a given coal there is an optimum way to split the solid into other products. While these are not rigid proportions, the actual characteristics of the material cannot be ignored.

It is desirable to have available technology to build a coal refinery that would produce a mix of products much like a major oil refinery does. The split of products would vary depending on market needs and characteristics of input material. This, however, represents a fairly complicated, integrated technogical development. Keeping this goal in mind one can take a look at the energy system of the country today, how fuel is used, and what impact coal might make initially.

III. Near-Term Objectives of Coal R&D Strategy

With a fuel substitute from coal for a portion of the oil and gas now used in the generation of electricity and for a substantial portion of the oil and gas used in industrial heating processes, the existing and projected supply-demand deficit for natural gas and oil products could be significantly reduced. In addition, production from coal of a boiler and heating fuel (whether gaseous, liquid, or refined solid) may provide the lowest cost clean fuel from coal.

Thus, a significant emphasis of the coal R&D program should be to provide substitute fuels for existing boilers and industrial processes as well as low-B.t.u. gas for new powerplants.

This does not mean that R&D on coal refinery processes or on production of a high-B.t.u. gas would not be simultaneously pursued. The solvent refined coal process can produce a boiler heating fuel in the near future if work underway at the present time continues to be successful. This suggests that initial pilot plant activities be focused on the supply of clean boiler fuel from coal.

The feasibility of making a product that is liquid at room temperature by adding hydrogen to solvent refined coal should be explored. The other unit operations involved in producing other liquid products and high-B.t.u. gases from coal should also be investigated to determine if direct substitutes for pipeline gas as well as an optimum selection of processes for a Coal-Oil-Gasification (COG) plant may be economically feasible.

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The next level of improvement of low-B.t.u. gasification would be to pressurize the gasifier so that the fuel can be burned in a gas turbine coupled with a conventional steam boiler. The overall thermal efficiency of a conversion to electricity may be increased by as much as 25 percent in such a system.

The overall guiding principle of the coal R&D program organization should be that an adequate knowledge base supported by an appropriate scale of experimentation must be established before the program moves on to pilot plants and demonstration plants. This does not imply an overly cautious program or one which would proceed with no technical risks but rather one in which the probabilities of success or failure of each venture and the costs and potential benefits of the risk are clearly understood.

In parallel with the coal technology programs, thorough environmental impact analyses are needed for large scale implementation of potentially successful processes. These analyses should anticipate the technical problems that will be encountered in meeting environmental standards. Resulting from these studies will be the early incorporation of design changes into research and development program in order to accommodate environmental objectives. Such high priority defensive research will avoid serious delays in building large scale demonstration plants and in commercializing the technologies.

As the program moves toward the construction of large scale demonstration plants, additional mechanisms such as the Defense Production Act of 1950, as amended, may be necessary to assist in bringing on line technology that is nearly ready for commercialization. If the research base has been adequately established and if market conditions are accurately judged, the potential liability of the Federal Government in underwriting some of these ventures would be small. Even f companies do not respond, at least an independent evaluation of the status of the technology will be gained in the process.

IV. Rationale for Coal Liquefaction R&D Component Recommendations

Coal liquefaction has been neglected as a technical option relative to high-B.t.u. gasification and existing technology for low-B.t.u. gasification. The liquefaction process is important in view of the objective of COG refineries, making clean substitute fuels available for utility and industrial boilers and providing fuel for transportation systems.

Based on its current state of evolution, the solvent refined coal (SRC) process promises to be attractive. However, other processes based on catalytic or pyrolytic processes will also be investigated. An engineering design of a potential SRC demonstration will be undertaken. By committing the concept to engineering drawings the supporting technology problems that remain to be dealt with will be identified. Other new thrusts include development of a test site for the supporting technology.

Depending on the catalyst used in synthesis either a high-B.t.u. gas (methane) or a liquid product (methanol) can be produced. Methanol is potentially a very attractive form of clean fuel from coal and is generally useable in transportation. Catalytic processes are common to a number of concepts for conversion of coal to liquid form and constitute a fundamental area of investigation for the success of alternative liquefaction processes.

Of major importance is the expansion of system evaluation activities currently underway in order to identify the gaps in supporting technology in various liquefaction concepts considered for pilot plant installations and to ensure that the pilot plants are adequately designed and funded to produce the engineering data required to estimate potential economic feasibility.

V. Rationale for the Low-B.t.u. Gesification Component Recommendations

A new important effort is system evaluation of existing and modified versions of low-B.t.u. gasifiers which could be used to provide boiler fuels for existing equipment or used in combination with combined cycle central station powerplants. The use of low-B.t.u. gasification to provide synthesis gas to chemical processes is to be evaluated.

Supporting technology (some of it is common with high-B.t.u. gasification) will be examined. In particular, the mechanical reliability of fixed, fluid, gravitating, and entrained bed gasifiers to be used in such systems must be established.

Studies on the implementation of low-B.t.u. gas would be conducted. The most attractive application of low-B.t.u. gasification is for new powerplants in combined-cycle applications. Use of synthetic gas in the turbine will require efforts to establish the corrosion characteristics and necessary levels of gas cleanup in order for such systems to function.

VI. Rationale for Direct Combustion Element Recommendations

This effort is directed at increasing the prospects for direct utilization of coal. It is aimed at developing or at least establishing the potential of fluidized bed combustion devices which can be integrated into powerplant designs to improve heat transport characteristics and to provide for coupling to combined-cycles as well. Both low and high pressure beds will be investigated. Direct combustion of coal employing burners with an additive that provides for removal of sulfur, etc., will be explored. Problems of interfacing fluid bed burners with existing technology will be analyzed. Finally, systems evaluations have to be undertaken to determine technological support difficulties, major research areas and comparative economics.

VII. Rationale for Systems Studies Element Recommendations

A number of systems studies of high priority must be commenced immediately in order to broaden the knowledge base and to establish quantitative criteria for evaluating competing technologies for producing clean fuels from coal, and systems for extraction of coal from surface and deep resources.

Various clean fuels from coal will be analyzed within the context of the national energy system, taking account of fuel substitution, relative prices between various fuel forms, and the state-of-the-art of various technologies. These analyses will include consideration of whether gaseous liquid products or a mix appears to be most cost-effective, whether the gaseous products should be low or high-B.t.u. quality, and whether the liquid products should be a synthetic crude oil or a more optimal form such as methanol might be desirable.

Major studies should be undertaken on the impact of developing various Eastern and Western surface and deep coal deposits, e.g., what this might mean to transportation requirements, population shifts, degradation of the environment, etc.

There are various projects of coal use ranging from about the present rate to three times this rate by 1985. These different rates of coal use imply very different requirements for manpower, capital, industrial and urban development.

It is essential that an overall systems evaluation capability be established using a common set of rules on technological success and failure probabilities, environmental impact, cost of capital pricing policies, etc., in order that the Federal Government may have the framework in which to evaluate various technologies in the early stages of development.

VIII. Reducing Technical Risks of Ongoing and Newly Instituted R&D Activities in the Coal Program

A major thrust of the proposed funding supplement is to examine ongoing programs that have reached the pilot plant level and put additional funds into them to develop the supporting technology necessary to make the pilot plant operate. The results from this operation will then be used to select systems that will be encouraged on to commercial operation. This would be a basic change in the philosophy of the coal R&D program. To some people, it might be viewed as back-filling. However, in many of the processes now at the pilot scale, it is not possible to continuously operate them because of ineffective technology for coal feeding, filtration of particles from liquid streams, and hot gas cleanup and inadequate valves and piping which cannot withstand the corrosive and erosive effects of multi-phase high temperature, high pressure gas streams. R&D on these devices has not received sufficient support in past programs. Most effort has been expended on the conversion units rather than on all the other elements of the process that must function reliably if the complete system is to operate.

IX. Rationale for Funding Classifications

It is necessary to begin ordering long-lead-time components for pilot plants many months in advance of actual construction. For example, typical lead-time for large shop-fabricated pressure vessels now is 24 to 28 months from receipt of order. Accordingly, a number of non-pilot plant projects show budget request for funds for FY 1975 substantially above bench-scale and process development requirements, while continuing to estimate for cash outlays at lower levels. The budget for long-lead-time components enables orders to be placed, while actual cash requirements do not need to be met until many months later. This, of course, means that the necessary budgetary funding authorization is required to enable OCR to commit contract funds to the contracting organizations. In the absence of these funds, the contractors are unwilling to place such orders. It will be noted that in a typical time schedule, design of a process development unit requires six months before construction; that design of a pilot plant requires 12 months before construction; and that design of a demonstration plant will require 18 months before construction. Orders for long-lead-time components can be placed while design is in progress, and in addition these typical time periods for design may still be too short from the budget point of view for procurement purposes where longer-lead-time components are involved. Also, some process development involves pilot-plant-size components.

CRITERIA USED FOR EVALUATING PRIORITIES OF PROGRAMS AND PROJECTS

The priorities of the programs in coal R&D have been established in accordance with the following criteria, ranked approximately in decreasing order of importance:

1. Have major near-term impact on fuel supplies, i.e., provide coal-derived products which can be used as substitutes in utility and industrial boilers, thus freeing limited oil and gas supplies for higher priority uses;

2. Develop an adequate knowledge base in coal science and technology to allow for rapid, orderly and responsible expansion of coal conversion R&D in subsequent years;

3. Scale elements of expanded program commensurate with the knowledge base that is currently available to support that element, i.e., avoid both starving projects which can be accelerated with reasonable technical risk, and expanding program elements beyond their capacity to effectively use additional funding;

4. Have a major impact on capability of coal mining industry to provide adequate quantities of coal from deep mines in the East and surface mines in the West by means which are acceptable from the point of view of both human health and safety and environmental quality;

5. Be capatible with the eventual development of large-scale commercial coal processing (liquefaction, gasification, etc.) plants including the Coal, Oil, Gas (COG) refinery concept.

DEFINITIONS

The typical steps for R&D culminating in commercial plants are: (1) small process test unit, usually called a process development unit (PDU), after successful bench-scale research; (2) a pilot plant which provides engineering data for scale-up purposes; (3) if necessary, a demonstration plant about 50 times the size of a pilot plant, and about one-fifth the size of a commercial plant. (It is considered a substantial risk to base the commercial plant design on the engineering data from a small pilot plant, rather than on the demonstration-size plant, but under favorable conditions this is sometimes done.)

PROGRAM

I. Coal Liquefaction

The Office of Coal Research program for coal liquefaction represents a substantial acceleration of effort over previous years, in response to changes in the Nation's priorities. Coal liquefaction will help meet the increasing demand for petroleum and liquid fuels with reduced reliance on imported oil. Such research is a vital part of meeting the Nation's total energy needs for the future.

Multiproduct coal conversion, rather than a single product process, provides a more efficient process with lower unit costs. Clean byproduct gas can be used as a fuel for electric generation and also upgraded to pipeline quality gas to supplement natural gas supply. Accordingly, a major objective of the OCR program is its plan for process flexibility by combining complementary processes now being developed separately, emphasizing the best features of each component process.

Vital to this objective is the early demonstration of a plant in an effort to save from 2 to 5 years' lead time over a normal development pace prior to commercialization. A vigorous program adequately funded could lead to commercialization in the late 1970's by using appropriate Federal incentives. Low-sulfur, ash-free, clean-burning liquid fuels from coal can provide fuel for existing powerplants as well as for new conventional plants and new advanced cycle powerplants. Several processes are available for the demonstration-scaled plant development for the production of clean solid gas and liquid fuels from coal.

The pyrolysis pilot plant at Princeton, New Jersey, (based on successful bench-scale research and process development) is in continuous operation providing engineering data for scaleup, and work is required to decide uses for the clean coproducts. A pilot plant for solvent refined coal (low-ash, low-sulfur) has been constructed at Fort Lewis (Tacoma), Washington. Support research projects are included in the program to improve the economics of the processes and to bring about economic feasibility of coal liquefaction at an earlier date.

The OCR program is an across-the-board approach designed to explore and develop all reasonably possible processes for producing clean liquid fuels from coal. Success in this area is one of the few alternatives to a continuing intolerable dependence on imports for at least our vehicular fuels.

A. Pilot Plant Projects

1. Direct Hydrogenation Projects

FY 1974	$ 8.00
FY 1975	13.00

Liquid and gaseous fuels from wells (petroleum derivatives and natural gas) are hydrocarbons--compounds of elemental hydrogen and elemental carbon. Coal is largely carbon. Accordingly, to make substitutes from coal for such petroleum derivative fuels (gasoline, fuel oil, etc.) and natural gas, it is necessary to add hydrogen to the coal carbon:

Coal	plus	Hydrogen	equals	Methane (natural gas)
C	+	$2\ H_2$	=	CH_4

The actual processing of coal into hydrocarbons is not direct, the hydrogen being derived from water (steam). The ingredients of gasoline are higher hydrocarbons (such as C_3H_6, C_4H_6, C_3H_8, etc.). However, the basic ingredients, carbon and hydrogen, are the same.

A major part of the cost of converting coal to liquid fuels is in the hydrogenation step (combining carbon in the coal with hydrogen), so that the cost of this part of the process goes far to determine the economic feasibility of conversion of coal to liquid fuels. Accordingly, several prospective methods of hydrogenation are being investigated.

a. Ebullated Bed, Prototype. Funds will be used to design and construct a prototype plant to develop on a substantial engineering scale the catalyzed hydroliquefaction of coal to produce clean synthetic crude oil. The prototype plant will use the ebullated bed principle. It will represent a reasonable, low-risk scaleup from a Process Development Unit (PDU). The PDU has been operating satisfactorily since 1966. Scaleup factor amounts to 84 tons coal per day for the PDU to 250-700 tons coal per day for the prototype plant for production of synthetic crude from coal.

b. Fixed-bed Hydrogenation. This process involves fixed-bed catalytic hydrogenation of coal in a coal-oil slurry. Key features of this process are: (1) use of a simple, unique reactor design that allows processing of the coal slurry without plugging of the bed of pelleted catalyst, and (2) use of a commercial catalyst for desulfurization of heavy petroleum oil. The expected primary product is a No. 6 fuel oil. Process development should be completed by FY 1975, including design of the pilot plant, with construction to start in FY 1976.

2. Solvent Extraction Based Projects

FY 1974	$12.55
FY 1975	9.00

a. Solvent Refined Coal (SRC) Pilot Plant. Solvent refined coal (low-ash and low-sulfur) can be used in either liquid or solid form, the form depending on the amount of solvent left in the product. Accordingly, this project is a major part of OCR's liquefaction research program, as well as a potential source of low-sulfur, low-ash solid fuel for existing powerplants and industrial installations.

In the solvent refining process, coal is dissolved in a heavy aromatic solvent under moderate hydrogen pressure. The solution is filtered (to remove ash and insoluble organic material) and fractionated to recover the solvent. Small quantities of hydrocarbon gases and light liquids are produced, along with heavy organic material. Solvent refined coal has a melting point of about 350° F and contains about 0.1 percent ash and less than 1 percent sulfur. Its heating value is about 16,000 B.t.u.'s per pound regardless of the quality of the coal feedstock. The solvent refining process removes all of the inorganic sulfur and 60 to 70 percent of the organic sulfur in the coal.

In 1962, the Office of Coal Research awarded a research contract to Spencer Chemical Co. to study the technical feasibility of the solvent refined coal (SRC) process. In 1966, a contract was awarded to Pittsburg & Midway Coal Mining Co. (successor to Spencer Chemical) to study the commercial feasibility of the SRC process through design, construction and operation of a pilot plant to process 50 tons of coal per day. The design for the pilot plant was completed by Stearns-Roger, Inc. in 1969. In late 1971 Rust Engineering Co. was selected through competitive bidding to construct the pilot plant at Fort Lewis, Washington; construction was started in July 1972 and completed in November 1973.

b. Delayed Coker Process. The objective of this project is to investigate the technical feasibility and economic potential of conversion of coal to distillate fuels by extraction and thermal cracking in a delayed coker. The key feature of this process is the use of a delayed coker for carrying out most of the operations including removal of the char and ash. The char and ash would be removed in the delayed coker by conventional hydraulic drilling. If successful, this process could be readily scaled up with a high degree of confidence because the equipment and the related technology are already available.

3. Carbonization Projects

FY 1974	$ 4.50
FY 1975	10.60

a. Clean Coke, Liquids and Gas. Bench-scale research has been completed and the process development work will be completed about the end of FY 1974. The process development unit is being operated to establish the feasibility of the operation, and studies are being pursued of waste water to avoid water pollution and to avoid corrosion of plant equipment. The project will be ready for pilot plant in FY 1975. Costs are being shared by industry cosponsorship.

The objective of this project is to enable use of high-sulfur coals for coke production, and to avoid pollution in the coking process. It will also improve the economics of OCR's project for solvent refined low-sulfur, low-ash coal. The clean coke process combines low-temperature carbonization and hydrogenation of coal. The process emphasizes the production of coke and chemical products, but production of liquid fuels can readily be included if desired. The amount of hydrogen required for the chemical products is about one-half that required for liquid fuels. The process requires no external hydrogen supply, and is essentially non-polluting.

b. Char-Oil-Energy Development (COED) Pilot Plant. The pilot plant is designed to process 36 tons of coal per day and hydrotreat 30 barrels of coal-derived oil per day. The plant is fully operational at the throughput capacities of coal and oil for which it was designed.

The COED process converts coal to synthetic crude oil, gas, and char, through fluidized-bed pyrolysis and subsequent hydrotreating of the coal oil to synthetic crude oil. The volatile products released from the coal in the fluidized-bed reactors pass to a product recovery system for recovering the oil and cooling the gases. The oil from pyrolysis is filtered to remove solids. The solids-free oil is pumped up to pressure and mixed with hydrogen from hydrotreating in a fixed-bed catalytic reactor operating at 750° F and 3,000 lbs per square inch. Hydrotreating removes sulfur, nitrogen, and oxygen from the oil and produces at 25° API synthetic crude oil. The gas from the process can be sold as fuel gas or converted by application of additional technology to pipeline gas or hydrogen. The residual char can be used as powerplant fuel, gasified to produce a fuel gas or processed to generate hydrogen, again through the application of further technology.

Two subcontracts were issued for evaluating the COED hydrotreated oil. The Atlantic Richfield Co. is processing distillate fractions of the COED hydrotreated oil to determine yields and product quality and to estimate a dollar value of the COED hydrotreated oil. The American Oil Company is performing analytical and burner tests to determine the suitability of the hydrotreated oil as a fuel oil.

Work is concentrated to acquiring additional data required to design a commercial plant. Other coals will also be evaluated in the process. A substantial quantity of oil will be supplied to the U.S. Navy for their tests, and research is underway on utilization of byproduct chars.

c. Low Temperature Carbonization, Pressurized. Development of the clean coke process and preliminary planning for a pilot plant will begin. Late in FY 1974 commitments for equipment items for the pilot plant will be made. Utilizing technology developed on Project COED and the clean coke process, the Oakridge National Laboratory will construct a process development unit for low temperature carbonization at about 10 atmospheric pressure. Concurrently, an engineering evaluation of the process will be completed for large-scale use of Eastern coal to manufacture clean liquids, solids and gases for use in Eastern powerplants.

4. Fischer-Tropsch Synthesis Variations

FY 1974	$ 2.00
FY 1975	7.00

The objective of this program is to evaluate the most advanced technology for production of clean liquid fuels from coal-derived synthesis gas and develop an economic design for a commercial-scale plant. This program involves pilot-scale investigation of synthesis gas production from coal as required to demonstrate capability for production suitable for conversion to clean liquid fuel by advanced Fischer-Tropsch processes and methanol production processes. The project includes comprehensive engineering evaluation and conceptual design of an advanced commercial-scale plant for production of clean liquid fuels from synthesis gas generated from coal.

5. Design of Prototype Plants

FY 1974	$ 7.00
FY 1975	17.00

A single prototype plant for both the Solvent Refined Coal (SRC) process and the COED liquefaction process will be designed, since these two processes have various components in common. This will provide the achievement of two objectives at a greatly reduced cost.

a. The SRC process produces a de-ashed, desulfurized solid fuel for electrical utility applications. This plant will represent a scaleup factor of approximately 200 in capacity relative to the SRC pilot plant in Tacoma, Washington. The prototype plant design will remain flexible with respect to separation and hydrogenation systems until substantive operating data are obtained from the Tacoma pilot plant and the Cresap operation. The prototype plant is scaled to define economics for producing a No. 6 (0.5% sulfur maximum) fuel oil and a No. 4 (0.2% sulfur maximum) fuel oil. Prototype plant unit costs of $1.25 to $1.50 per million B.t.u.'s are indicated utilizing coal priced at 35¢ per million B.t.u.'s. Commercial costs for the oil may be 85¢ to 95¢ per million B.t.u.'s.

b. The COED process will be combined with a pressurized boiler, with the following operational objectives: (1) operation of the COED process at pressure to increase throughput rate and liquid yield; (2) consumption of the char in a sophisticated pressurized boiler to provide energy required for the potassium topping cycle for power generation to permit increase in the conversion of thermal energy to electrical energy (50-55%); and (3) control of the sulfur products generated when the char is burned. The COED process converts coal into a liquid, a fuel gas, and a char. The char is a solid fuel containing approximately 50% of the heating value of the coal used in its production. This char can be gasified to produce hydrogen, synthesis gas or a fuel gas, or it can be combusted directly to generate thermal energy. The process selected to consume the char must optimize its conversion and include a technique (auxiliary equipment or fuel bed additives) to control any sulfur compounds released. These objectives are accomplished in a unique coal conversion facility which combines a COED plant operating at pressure with a pressurized boiler.

6. Equipment and Materials Development

FY 1974	$ 3.00
FY 1975	4:00

The program for reactivation of facilities at Cresap, West Virginia, will modify the existing pilot plant to produce clean low-sulfur fuel oil from coal for power generation and industrial use. In addition, it will be utilized to test operations required in coal conversion processes such as coal feeding at high pressure, separation of extracted coal from ash and improved gasification systems.

The Cresap facility was designed to handle coal and process it at high pressure. The original plant investment was about $6.0 million; however, the current cost for construction of an equivalent facility would be in excess of $10.0 million. The process equipment required for mild to severe hydrogenation is installed at the plant.

The plant can be converted readily to a different process by changing the physical location of equipment, making minor changes to individual items of equipment and modifying piping. Such changes can be accomplished in considerably shorter time than required for construction of completely new facilities and at much less cost. By testing several processes in one plant, maximum use will be achieved for the existing pilot plant.

The initial phase of the program for Cresap involves rehabilitation of the exiting plant with modifications to assure reliable mechanical operation quickly for the basic extraction and hydrogenation operations. The modifications will remedy deficiencies experienced during previous operations and include changes necessary to meet current EPA regulations for environmental protection.

Plant operation after operator training and shakedown will demonstrate that solvent generated from coal at equilibrium operations is satisfactory for coal solution, and following hydrogenation of the extract produces a clean fuel. The product will be tested in various combustion systems to determine that fuel quality is satisfactory. Testing will also include sulfur and nitrogen levels to insure meeting environmental protection standards.

Alternate processes will be tested which by engineering analysis are potentially competitive economically. $2.5 to $5.0 million will be made available from non-Government sources to augment the requested appropriation. We would expect to operate the plant for 3-5 years, depending on processes to be tested.

B. Non-Pilot Plant Projects

1. New Processes

FY 1974	$ 1.65
FY 1975	6.30

a. Zinc Chloride Catalyst PDU. This project is oriented to produce lead-free gasoline of 90 octane or higher from coal. Basic tests show that through the use of zinc chloride as a hydrocracking catalyst the objectives can be achieved. It is intended to carry this project further to provide its feasibility for commercial application. This process has been satisfactorily demonstrated at small scale. Major problem encountered was the recovery of the catalyst.

b. Centrifugal Hydrogenation. This project will investigate a liquefaction process which provides for rapid and direct contact of gaseous hydrogen with solid coal at high temperature. Very short contact time for hydrogenation, followed by rapid cooling of the products, is known to minimize repolymerization of the products and favor the production in high yield of light oils (benzene, toluene, and xylene) together with some hydrocarbon gases. A rotating fluidized-bed reactor has a high capacity for coal conversion at short controlled contact time favorable for high yields of liquid products while heating finely divided coal to reaction temperature rapidly with hydrogen gas. Catalytic or noncatalytic processing is compatible with this reaction system.

c. Chemicals from Coal. A project to study the feasibility of using coal liquefaction products for the manufacture of chemicals is proposed which will provide a basis for capital and cost estimates for a commercial chemicals plant. This work will define the economics, estimated preliminary capital requirements and operating costs for a commercial plant which would use coal liquefaction products for the production of useful aliphatic and aromatic compounds. Product samples from several coal liquefaction processes will be subjected to process studies, analytical inspections and otherwise subjected to laboratory evaluations for characterization. Utilizing data obtained from these studies, inspections and process evaluations, preliminary process flow sheets, and materials balances will be prepared. Capital and cost estimates will be generated for a commercial chemicals plant.

d. Methanol Liquid Catalysts. This is a process for conversion of coal to methanol using known technology, and then developing a process for conversion of methanol to high octane gasoline in a catalytic process, using a new catalyst. This process may have the potential for earlier commercial application than other coal liquefaction processes, since the remaining research and development required may be completed in one to two years.

e. NUCO (Nuclear-Coal) Process. This nuclear-coal conversion process has high yields of oil and gas with less ecological impact. In this process 1/2 to 2/3 of the process coal is replaced with nuclear energy, reducing the ash and carbon dioxide. It may be competitive by 1985. Phase I for two years is for demonstrating unit selection, technical and economic verification, development of a detailed program plant, and to define the probability of success.

2. Engineering Support Projects — FY 1974 $ 3.10; FY 1975 8.20

a. Engineering Evaluations. Preliminary reviews are to be made of all OCR projects for coal liquefaction, including their suitability for combining under the "COG" objective.1/ Preliminary specifications for a "COG" plant will be prepared as a second-generation pilot plant. As work proceeds in each of OCR's liquefaction projects, it is particularly necessary to maintain a continuous review of technical and economic status as to the commercial plant that can be projected from the research results. This requires detailed engineering studies by independent third parties. Otherwise experimental work costing far more than the evaluations may be undertaken unnecessarily.

b. Cost Estimates. An experienced engineering construction firm will be retained to evaluate technical and cost aspects of the alternative processes for production of clean liquids from coal. This activity will provide information for periodic evaluation of the economic viability of alternative processes. The contractor will have access to computer services and will provide cost engineering and process economic studies and services to private industries and to the U.S. Government in a concerted effort to expedite selection of the most promising process at minimal cost.

c. Liquefaction Data Book. Handbooks are essential aids to engineers; however, handbooks must present data in condensed forms and with little critical evaluation. They are thus prone to be outdated and are not sufficiently comprehensive for the task at hand. This has led the large engineering firms to develop data books of technical and design information for the specific design and evaluation efforts of interest to them. This is accomplished by groups of experts who evaluate all available fundamental data on a subject, correlate them within the most advanced framework, and then present their findings in the most convenient forms for design engineers to use. Designers are thus freed from the tasks of searching for information; errors of interpretation, extrapolation and interpolation are minimized; uniformity of design bases is insured; and greater accuracy of design is achieved. This project would initiate and continue the compilation of a data book for use by the many organizations participating in the national program for conversion of coal to clean fuels. The first year or two will be used to cover existing data. A continuing effort is necessary to keep up with new data and to replace obsolete data.

d. Heat Exchanger. The synthesis of fuels from coal, both liquid and gas, is dependent on the addition of large quantities of energy supplied at high temperature for the endothermic reactions of char and steam and the devolatilization of char. In conventional processes, this energy is

1. For description of the "COG" concept, see the "COG Research Project."

supplied by the combustion of oxygen with the char, by electric energy, or by an intermediate heat carrier which releases either latent heat or chemical energy. Process chemistry is often adversely affected by the method to supply this energy. Heat pipes can transfer large amounts of thermal energy over their length and through a partition with virtually no temperature drop, and at high heat-transfer efficiency. Therefore, they allow the isolation of the heat source from the heat sink; in this way, heat from an energy source can be transferred from the source and released in areas where a careful control of the process composition is important. The attractive heat transfer properties of the heat pipes are the result of a closed system in which a transfer fluid is continually vaporized, absorbing large quantities of heat at the heat input end, and is condensed, releasing that heat at the output end. Because of the energy transfer capabilities of heat pipes, the evaporator end can be heated by thermal energy in a system that is physically and thermally isolated from the condenser end of the heat pipe where the energy release occurs.

e. Coal Liquid Pipelining. After coal has been converted from a solid state to a gaseous or liquid state the products must be transported to the point where they will be used. There are problems which must be solved concerning this transporation. These consist of ecology, viscosity, pumping requirements, friction losses, the volatile nature of some of the byproducts, etc. This program will entail engineering and economic studies directed to solving these problems. The endproduct will be an engineering data book which will be available to designers of future projects.

f. Characterization of Liquid Fuels from Coal. It is necessary to determine the physical and chemical characteristics of samples prepared under different conditions of temperature and pressure and flow rates. The products must also be characterized in terms of refining properties and suitability for upgrading into quality liquid fuels. The work of this project is to develop the required analytical methods for accomplishing these purposes. The objective is to enable the selection of the type of conversion process and operating conditions that would provide liquids from coal having the most favorable refining characteristics. The Bureau of Mines facility at Bartlesville, Oklahoma, will be used for this purpose.

3. Other Supporting Projects

FY 1974	$ 1.70
FY 1975	4.50

a. Special Purpose Coal Preparation. In connection with the coal types being developed under this project, work is being undertaken for development of high combustion devices suitable for sub-bituminous coals (and chars) for use in conventional powerplants, as well as new methods of converting coal to electric power.

This project is generating new knowledge as to the impact of coal composition, coal mining, and coal preparation on the practical aspects of gasification and liquefaction. (As mined, coal is a heterogeneous and variable mixture of materials. Only by coincidence does the mined product approach optimum composition for any given process and, even then, the composition will be subject to variation.) Gasification and liquefaction processes will be made more attractive economically, and more trouble-free operationally, if the raw material fed into the system can be made uniform in character and near optimum in composition. Current research objectives

include: (a) establishment of the relationship between a coal's composition and its behavior and yield in conversion processes; (b) development of commercially feasible methods for controlling the composition of raw coal to provide process feedstocks which can be uniformly maintained at the desired quality; (3) development of mining and preparation techniques which will increase productivity without decreasing the quality of the product and which will provide for reclamation of the mined land and provide for the useful disposal of refuse materials; and (d) development of fully identified and representative samples of the Nation's coal seams for experimental use in defining the utilization potential of various coal types.

A comprehensive program has been conducted to develop the information needed to properly classify coals for gasification. In addition, this information will be useful in engineering gasification plants and recommending modifications in present plant designs. Reactivities have been determined on a number of chars produced from lignites, sub-bituminous and bituminous coals and anthracites.

Recent studies have shown that it may prove possible to use coal itself in concentrating oxygen in an air stream; if this means of separation proves economically feasible, it will be important in making cheap oxygen available for coal gasification and other processes.

An extensive study is being made of the noncombustible material that is present in all coal seams, but in varying quantities and compositions. As massive volumes of coal are gasified and liquefied and as major sources of rare elements are depleted, it may become economically attractive to extract such elements as beryllium, scandium, gallium, tin, copper, uranium, and vanadium.

The presence of mineral materials can be harmful as well as beneficial. Thus, it is desirable to know and control the corrosive agents present in some coals (sodium potassium, calcium, and magnesium).

A sampling operation has been used to increase the representation of Western coals in the sample collection available to all OCR contractors. Coal seams were sampled in Colorado, Wyoming, Montana, Utah, and Washington, providing more than 150 samples of coal types from more than 75 seams.

b. Lignite Resource Development. This project is directed toward development of processes for upgrading lignite into fuel gas, liquid fuels, chemicals, and related products. This requires R&D to determine technologically obtainable economic yields of useful products from lignite, and four types of research are contemplated: (1) methods of dissolving lignite in the presence of hydrogen, carbon monoxide, and mixtures of carbon monoxide and steam; (2) carbonization studies to determine yields, and methods of upgrading products; (3) hydrogenation-distillation studies on extracts using various catalysts; and (4) studies on continuous low-pressure hydrogenation of lignite under a range of operating conditions. The products will be determined, using typical identification techniques, and typical results will be analyzed for possible development of an integrated process development and possible pilot plant application.

c. Western Coals Adaptation. The process being developed by this project indicates a potentially short residence time, and accordingly high efficiency in utilizing capacity for clean liquefaction and gasification, particularly since high conversion yields are also indicated. Lower capacity costs can be a major contribution to lower unit costs for products of coal conversion. This project originally emphasized coal liquefaction, and in view of the supply situation of natural gas the objective has been broadened to include coal gasification problems. A second generation hydrogenation reactor has been added based on a fully turbulent flow, replacing movement of catalyst-treated coal by a medium-pressure hydrogen stream; this improvement is based on preliminary studies. The studies supporting coal conversion are in progress, and include application of the catalyst, recovery of the catalyst, basic related analysis, and studies for upgrading the products. These studies will keep pace with development of the main hydrogenation reactor.

Research utilizing Western U.S. coals in a direct first-stage hydrogenation process to yield synthetic crude oil, solid char fuel and fuel gases is the main objective of this project. Certain properties of this raw synthetic crude (such as low hydrogen content, high oxygen content, sulfur content, etc.) would prohibit feeding this material into a conventional oil refinery. A second stage, therefore, involves hydrotreating to yield a synthetic crude oil which could serve as a feedstock for a modern conventional refinery. Current investigations are also being conducted relative to the production of high quality gasoline in substantial yields from Western coals.

At present, the choice of catalysts is limited by available techniques for impregnating the catalyst on the coal and by catalyst loss. Investigations are being conducted to find additional and improved techniques for establishing intimate contact between catalyst and reactants.

Work on the development of dual functional catalysts for hydrocracking of coal oils is being done with the objective of developing catalysts having appropriate activity and selectivity necessary for the treatment of coal oils. This work is now being directed toward development of more efficient reactor systems, more active and selective catalysts, the production of high-octane gasoline of moderate aromatic content, low-sulfur fuel oils, and aromatic chemicals. Supporting work is being conducted in the areas of reaction kinetics and mechanisms of the processes involved in conversion of coal to liquid fuels and chemicals, and to gaseous fuels.

d. Desulfurization. This ongoing project is a laboratory-scale investigation of process-variables which affect the degree of desulfurizing of solvent refined coal and other liquids. (This will be a supporting effort to coal liquefaction projects. Desulfurizing is a very significant part of those processes.) Various coals are being tested for these purposes. The contractor is investigating the independent variables affecting the degree of sulfur removal by hydrogen treating while in solution--to identify those variables significant enough to warrant more complete study. About 25 percent of their study may be completed in sufficient detail to develop mathematical or graphic model of the effects of the significant variables. The results will be used to develop the process design of a coal desulfurization process in sufficient detail to estimate its economic feasibility.

Reducing the sulfur content of the fuel for electric generation offers advantages over flue gas treatment, since it will permit one desulfurizing plant to serve several powerplants, thereby enabling economies of scale. There are few reserves of low-sulfur coal in the populated Eastern States, where almost 40 percent of the sulfurous air pollution comes from electric generation. The project will test the concept of reducing the sulfur content of high-sulfur coals by hydrogenating the coal while dissolved in an organic solvent. This project supports OCR's project for solvent refining of coal.

e. "COG" Research. Engineering studies are needed as to yield and economics for combinations of complementary processes, as well as for individual processes, in accordance with the "COG" concept.

The "COG" concept for coal liquefaction is aimed at further reducing the unit costs by incorporating complementary gasification and electric generation processes into a "COG" complex, with endproducts (1) low-sulfur, low-ash solid fuel for powerplants, (2) oil, and (3) pipeline gas.[1/] To further enhance the economics, special coal preparation studies are proposed; and to reduce costs and avoid environmental impediments to commercial application, research for related methods of large-scale mining and preparation is required with consideration of environmental factors. In the "COG" concept the ash, removed by filtration in the Solvent Refined Coal process, is introduced into the BI-GAS process which serves as a source of hydrogen for the Solvent Refined Coal process and subsequent hydrogenation. The result is high-B.t.u. pipeline gas without the normally difficult and expensive methanation stage, and the net hydrogen requirement of the combined (COG) process is substantially reduced; liquid product would be about 60 percent of the output in B.t.u.'s. Other economies may be achieved by interrelating other complementary processes.

Further development of the "COG" concept involves incorporating results from the COED project and a char-gasifier for clean power based on acceleration of the molten-salt project (for which successful bench-scale research was performed under a previous OCR contract).

II. Coal Gasification (High-B.t.u.)

New discoveries of natural gas are inadequate to keep pace with rising demand. Pollution controls intensify demand for gas as a clean fuel for electric generation and industrial use--as a substitute for high-sulfur coals. The shortage of domestic and imported low-sulfur fuels is causing higher prices for low-sulfur oils.

In 1971, OCR and the American Gas Association (A.G.A.) entered into an agreement covering three coal gasification pilot plant projects and supporting projects to jointly provide funding (two-thirds by Government and one-third by industry) of $30 million annually beginning with FY 1972. It is estimated that this pilot plant program should lead to demonstration of commercial feasibility of coal gasification by the end of FY 1979 or FY 1980.

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1. A "COG" type plant consuming 10,000 tons of coal daily will produce approximately 17,500 barrels of oil daily, 60 million cubic feet of high-B.t.u. pipeline gas (at 1,065 B.t.u.'s per cubic foot), as well as a substantial volume of low-sulfur, low-ash solid fuel, at reasonably competitive cost.

During the pilot plant phase, OCR's three ongoing pilot plant projects will be pursued, and successful results from several supporting research projects will be incorporated into these three pilot plants. The supporting projects are intended to increase the technological feasibility of coal gasification, as well as to reduce the unit cost for increased economic feasibility.

The proposed budget for FY 1975 includes the $31.8 million in the jointly funded program, and additional funds necessary to deal with significant lags and inflationary costs which are impeding the current ongoing pilot plant and supporting research projects.

A. Pilot Plant Program (with A.G.A.)	FY 1974	$20.0
	FY 1975	31.8

The Federal funding is being enhanced by funds from the American Gas Association. The proposed funding is as follows:

	FY 74	FY 75
1. Hydrogasification	$4.670	$3.000
2. Lignite Gasification	6.990	2.000
3. BI-GAS	1.330	13.200
4. Additional projects essential for technological and economic feasibility of coal gasification processes, beneficial results of which will be incorporated in the above three pilot plants:		
a. Steam-Iron Process	4.670	6.000
b. Liquid Phase Methanation	.340	4.000
c. Self-Agglomeration Process	.670	1.000
d. Other High-B.t.u. Gasification Projects	--	.700
e. Demonstration Plant Design	--	.700
f. Engineering Assessments, Evaluations	1.330	1.200
	$20.000	$31.800

1. Pipeline Gas by Hydrogasification. The HYGAS pilot plant in Chicago for conversion of coal to pipeline-quality gas represents a capital investment of about $10 million. It is designed to convert 75 tons of coal per day to 1.5 million cubic feet of high B.t.u. gas. The Institute of Gas Technology gasification program was initiated in 1946 under sponsorship of the American Gas Association. The early origin and continued development of the concept is largely the reason that the HYGAS process is the most advanced of the coal-to-gas schemes under development.

Pilot plant construction began in 1969 and was completed in 1971. Several significant operating runs have been made, the most notable being successful operation at 1,000 pounds per square inch gauge. Concentration of methane in the hydrogasifier effluent exceeded 40 percent. This corresponds closely to the design concentration. Operating problems with essentially off-the-shelf mechanical equipment delayed initial gas production. Problems are being solved one at a time and semicontinuous operation of the hydrogasifier has been achieved. The gas purification and methanation systems have been checked out and are on standby awaiting continuous operation of the hydrogasifier.

2. Lignite Gasification Process. CO_2 Acceptor Coal Gasification Process was developed by Consolidation Coal Company and carried through the laboratory stage by 1964 when the Office of Coal Research awarded a contract to complete the bench-

scale development of the process. This phase was completed successfully in 1968. Feasibility studies before and after the bench-scale work indicated the process had potential commercial possibilities.

Construction of the $9 million pilot plant at Rapid City, South Dakota, was initiated in January 1970, and completed in November 1971. The methanation facility will evaluate the packaged-tube reactor as a methanation technique. The pilot plant was constructed and is being operated by Stearns-Roger Inc. under subcontract to Consolidation Coal Company.

At the completion of plant shakedown tests in April 1972, a series of startup attempts was initiated. Each completed startup has generated additional operating data. Each run was terminated due to some mechanical problems which have since been solved.

3. BI-GAS Process. The principal objective of this research and development program continues to be development of the promising BI-GAS Process for production of high-B.t.u. pipeline gas from coal. The heart of the BI-GAS Process is the two-stage gasifier which uses pulverized coal (70 percent minus 200 mesh) in entrained flow.

In stage 1, the char is completely gasified under slagging conditions with oxygen and steam, producing both the synthesis gas and the heat required in stage 1 for the partial gasification of the fresh coal. The raw product gas from stage 2 is purified by removal of hydrogen sulfide and carbon dioxide and upgraded in B.t.u. content to pipeline quality by catalytic methanation.

The correlations obtained in the process development test were used to plan and design a large scale, fully integrated 5-ton-per-hour gasification pilot plant at Homer City, Pa. Responsibility for constructing the $25 million pilot plant was awarded to Stearns-Roger Inc. of Denver, Colorado on July 11, 1972, and a groundbreaking ceremony was held on July 27, 1972. Blaw-Knox Chemical Plants, Inc. was chosen to assist Bituminous Coal Research, Inc. in project surveillance in connection with the pilot plant.

Work has been aimed at optimizing the operating conditions for maximizing the methane yield in stage 2. It was also found that the physical effects in stage 2 can also influence methane yields from coal.

Concurrently with the work on the oxygen-blown gasifier, laboratory work continues in support of the total program. Catalytic methanation of the product gas to raise the calorific value to that of pipeline gas is being studied.

The design of a process and equipment development unit (PEDU) for studying fluidized-bed catalytic methanation was completed in 1971 under subcontract with Koppers Co., Inc. Data from this unit will be used for the design of the pilot plant methanator.

4. Additional Projects Essential for Technological and Economic Feasibility of Coal Gasification Processes. Because of interdependency, the six additional projects selected are vital; they add comparatively little to the total cost of the program, and yet their potential contribution to technological and economic feasibility is critical.

a. Steam-Iron Process. This is a unique process in that a pure hydrogen-steam mixture is produced for the HYGAS hydrogasifier. Combination of these processes theoretically produces the lowest cost synthetic gas.

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Hydrogen supply is one of the keys to successful development of the HYGAS process (as well as for synthetic liquid fuels). The steam-iron system represents an approach to the reduction of a hydrogen steam mixture as an alternate (in the HYGAS Process) to the electrothermal reactor and oxygen system.

b. Liquid Phase Methanation Process. The Liquid Phase Methanation Process is being developed for the production of high-B.t.u. gas from coal-derived gases. The process is capable of almost completely converting gas streams containing high concentrations of carbon monoxide into methane in a single pass through the reactor.

In this process, inert liquid is pumped upward through the reactor at a velocity sufficient to both fluidize the catalyst and remove the reaction heat. The low-B.t.u. feed gas is also passed concurrently upward through the reactor where it is converted to a high-concentration methane stream in the presence of the catalyst. The exothermic reaction heat is taken up by the liquid as sensible heat and by vaporization. The overhead product gases are condensed to remove the product water and to recover any vaporized liquid for recycle. The main liquid flow is circulatory through a heat exchanger for temperature control.

Future work will be aimed at selecting a preferred reaction liquid and catalyst to use in a more detailed reaction-variable study. A larger scale process-development unit is under construction.

c. Self-Agglomeration Process. This project is for development of a coal gasification fluidized-bed coal burner to provide the heat for steam gasification of coal for producing a "make" gas intended for subsequent conversion to pipeline gas. A major feature of the process is the method of combustion, which applies the "self-agglomerating" fluidized-bed technique for burning coal with simultaneous pelletization of the ash during the combustion.

In addition to providing a pelletized heat-transfer medium to the gasifier, the self-agglomerating fluidized-bed burner is effective for collecting the ash contained in the incoming fuel. Thus, the fuel can be burned to yield a combustion gas essentially free of flyash. This particulate-free hot combustion gas can then be expanded in an open-cycle gas turbine for recovery of kinetic energy.

A preliminary design of the pilot plant is being prepared. The objective is to obtain operating data sufficient for technical and economic assessment of the process applied to commercial production of pipeline gas. (The present scope of the program does not include conversion of the gasifier product, for example, through methanation.)

d. Other High-B.t.u. Gasification Projects. Novel gasifiers will be tested, including modifications of the Lurgi gasifier, to allow commercial gasification plants to be developed earlier.

e. Demonstration Plant for Pipeline Gas. The pilot plant program jointly financed since FY 1972 by the Office of Coal Research and the American Gas Association contemplates that the best results achieved in the pilot plant program are to be incorporated into a design of a demonstration plant. The demonstration plant design is starting in FY 1974, and will continue into FY 1975 as evaluations of the pilot plant work are made.

f. Process Selection, Evaluation, Designs, and Engineering Assessments. The contractor evaluates proposed research and assists in the continuous evaluation of all phases of the high-B.t.u. coal gasification program. It is essential that independent engineering evaluations be made as each process or process-step is developed. The contractor will prepare engineering designs and cost estimates for processes and process-variations, projecting from these figures a final cost figure for the product-gas. (Additionally, this work will facilitate termination of projects if they do not meet the technical and economic yardsticks established among the alternates.)

A highly qualified, unbiased engineering firm is vital to the program for evaluation of the various processes and components of processes to assist in the decision-making procedure to insure that the best results of the program are selected for commercialization to produce pipeline-quality gas at the lowest possible cost.

B. Support Projects

FY 1974	$ 5.40
FY 1975	6.00

The support projects are for equipment development, materials development, and process development, found to be necessary during the execution of the pilot plant program above.

1. Equipment Development. Production of high-B.t.u. gas from coal will involve large scale (from 16,000 to 100,000 tons per day) feeding of coal. The coal must be reduced to--and controlled at--closely graded particle sizes. It must then be fed into reactors operating a high pressures and temperatures (1500 psi and 3,000° F). Particulate matter must be separated from product gases. Char and ash must be discharged from the reactor. Equipment such as grinders, pumps, valves, filters, separators, instruments, etc., to meet all these requirements of capacity and conditions do not exist. Concepts must be formed; the most nearly suitable equipment must be modified, new equipment must be designed and all these tested and developed before large plants can hope to be operated.

2. Materials Development. The new processes being developed for the generation of high-B.t.u. gas from coal utilize combinations of temperatures, pressures, and operating conditions that create considerably more stringent requirements for materials of construction than are required in other sectors of chemical product manufacturing. In order to specify the materials that can survive these conditions for the lifetime of the plant with a high degree of reliability, it is necessary to know and understand the behavior and resistance of many candidate metals and ceramics under actual use conditions. A construction materials test and development program has been initiated to subject a wide range of materials to actual conditions (temperature, pressure, gaseous components) existing in each of the coal gasification pilot plants now being or to be operated. The response of these materials (signs of corrosion, weight loss, embrittlement) to their environment will be recorded, correlated, and will become the basis for materials specification.

3. Process Development. A program has been initiated to study, operate, evaluate and compare various techniques that can be used to manufacture hydrogen in large volumes. Processes now under investigation include the electrothermal gasification of char, the steam-iron process and the steam-oxygen process. As other candidate processes become known and appear suitable for similar evaluation they will be included in this process development program. The data generated will be used to establish which process for the manufacture of hydrogen should be included as part of a commercial coal conversion plant.

III. Clean Low-B.t.u. Gas

It is contemplated that R&D for low-B.t.u. gas will be of importance (a) to provide another alternative for clean electric power generation at high efficiency, and (b) to meet industrial demand for gas in process usage. These functions are expected to help curb excessive reliance on oil, natural gas, and LNG by enabling high-sulfur coals to be used for power generation and other purposes without pollution.

Two cofunded pilot/demonstration plants are planned with initial operation estimated for the FY 1977-78 period, thereby providing a basis for wide commercial application by the early 1980's.

A research effort for low-B.t.u. clean fuel gas from coal will be integrated with existing and advance gas turbines. The bulk of the research will be expended by OCR contract, supplemented by work in the Bureau of Mines laboratories. The major efforts will seek to develop low-B.t.u. gasification techniques as an outgrowth of past Departmental programs. A single projected commercial-size gasifier will be capable of producing sufficient low-B.t.u. gas for a 1000-megawatt powerplant, and the gasifier and its associated cleanup equipment can be tailored to a conventional plant, a gas turbine plant, or an advanced gas-turbine/steam-turbine plant.

Contract work began in July 1972. Individual unit processes in the high-B.t.u. gasification program contribute to the low-B.t.u. gas technology, except that no methanation will be necessary for low-B.t.u. gas. It is possible to accelerate the demonstration phase of the low-B.t.u. gas program without going through a prolonged program. However, such acceleration requires a pronounced increase in the level of funding.

This program involves research and development directed toward fluidized-bed, fixed-bed, and entrained-flow gasifiers. Pilot plants will be constructed to handle up to 50 tons of coal per hour. The plants will range from 120 to 200 megawatts generating capacity. Each will include a gas cleanup system to remove sulfur and particulate matter. In addition development is proceeding on a hot gas cleanup system, operating at gasification temperatures in order to increase cycle efficiency and further improve the economy of the processes.

As with the high-B.t.u. gasification program, the development of reliable and feasible hardware for plant operation requires investigation of a variety of processes, with the probability that different processes will be optimum for different coals.

Most of this program was initiated in FY 1973, thus the projects are still in an early stage of development. However, some significant results have already been obtained, including (a) completion of design of a 1200-pound-per-hour fluidized-bed gasifier; (b) conceptual design of an atmospheric pressure, entrained-flow gasifier for a 550-megawatt combined power system; and (c) completion of design of a laboratory-scale pilot plant for removal of sulfur from fuel gas by means of a fused salt scrubber system.

Assuming availability of funds in FY 1975 in conjunction with industry funding for these purposes, the low-B.t.u. gasification program will move forward at a faster rate, with further pilot plant construction beginning in FY 1975-76 capable of converting 50 tons of coal per hour to low-B.t.u. gas. Pilot plant construction for one low-B.t.u. gas project will be completed early in 1975.

A. Pilot Plant Projects (Gasifiers)

1. Atmospheric

FY 1974 $ 3.00
FY 1975 15.00

a. Entrained-Bed, Atmospheric. This gasification power system is an atmospheric entrained-bed slagging gasifier capable of producing low-B.t.u. fuel gas from highly caking coals containing a high percentage of sulfur. This gas will be treated for particulate and sulfur removal for expansion through a gas turbine combined cycle.

b. Suspension-Bed, Atmospheric. This project provides for the development of a process involving essentially an oxygen-blown, entrained-flow, coal gasification system, operating at 50-200 psi, to produce a low-B.t.u. gas (CO/H_2 - 2) at 1600-2000° after removal of H_2S. The project entails construction and operation of a 100 ton/day coal gasification pilot plant to produce 5-8 million s.c.f./day of the sulfur-free low-B.t.u. fuel gas for integration with a clean coke plant being developed by another OCR project. A major purpose of this project is to accelerate the design of a 10,000 ton/day demonstration plant based on the availability of equipment and knowhow for the construction of this 100 ton/day pilot plant.

c. Stirred Fixed Bed, Atmospheric. This gasifier will be for the special application of further utilizing waste char from large coal gasification plants. This project is for preliminary design of a 300 psi stirred fixed-bed gasifier of 50 tons/hour capacity for processing highly caking coal (with either air or oxygen moderated with carbon dioxide or steam). The stirrer or agitator enables the handling of highly caking coals. Construction of the designed gasifier as a cosponsored project is anticipated.

d. Three-Stage Fluidized Bed, Atmospheric. This three-stage reactor is an extension of the small-scale gasification research and development work performed under Office of Coal Research cognizance since December 1963. This work has indicated a degree of success sufficient to warrant a process and equipment development unit (PEDU) for the further development of a fluidized-bed gasification process for commercial operation. All types and ranks of coals are intended to produce low-B.t.u. gas, free from char, tars, sulfur or carbonyl sulfides.

e. Two-Stage Circular Grate Fixed Bed, Atmospheric. This gasifier involves a modification of technology used in an entirely different industry (for pelletizing iron ore). After gasification of coal in the circular grate, the carbonized coal will be processed further in a fixed bed gasifier. This will allow handling highly caking Eastern coal at high efficiency with potential recovery of chemical byproducts.

2. Pressurized

FY 1974 $16.20
FY 1975 31.00

a. Entrained Bed, Pressurized. This pressurized entrained-flow gasifier pilot plant may be about 90 percent constructed by the end of FY 1975. The unit will process about 50 tons of coal per hour. Electric generating

efficiency is estimated in excess of 45 percent thermal, with efficiencies of 55 percent--a reasonable expectation as further refinements develop. Airborne particulate discharge from commercial-size powerplants of this kind should be less than results now being achieved with high-efficiency precipitators, with acceptable levels of sulfur emission. (Ash would be removed as a molten slag, enabling recovery of chemicals, and sulfur is removed as elemental sulfur for use as a chemical.) In operation, the high-temperature exhaust from the gas turbine will contain substantial energy which will be recovered in a waste heat boiler and used to drive a steam turbogenerator.

b. Fluidized-Bed, Pressurized. The gasifier is a two-stage pressurized fluidized-bed gasifier with integral sulfur removal by injection of limestone as the sorbent for H_2S. The overall power conversion system will consist of the sulfur absorbent regenerator, gas turbine combined-cycle power conversion equipment along with the fluidized two-step gasifier. The program is divided into three gasification system phases --the process development unit (1200 lbs/hr), the pilot plant (5 tons/hr), and the demonstration plant (50 tons/hr). Compared to other gasification approaches this approach permits the utilization of caking coals and low-grade fuels and the utilization of solids with a wide size distribution, ¼ inch x 0.

c. Molten Salt, Pressurized. Preliminary research work and some pilot gasifier work have been performed by a company with some electric utility support. The key parameters required for low-B.t.u. gasification have been demonstrated. In this process, coal is partly combusted and completely gasified in a molten salt furnace. The sulfur and ash from the coal are retained in the melt, and the hot gases flow to a conventional gas-fired boiler where combustion is completed to produce steam for electric generation.

d. Fluidized Bed, Stirred, Pressurized and Hydro. In this process, coal is gasified with steam and air under efficient controlled conditions to produce a non-polluting fuel gas. A wide range of coal ranks may be processed, including fines. The process is designed for optimum efficiency (85%). The gasifier operates in a nonslagging mode, permitting low temperatures and low air requirements.

Coal is pretreated with air at 800° F and then gasified in a fluidized bed at 1900° F and 300 psi. The product gas, after particulate removal and energy recovery, passes to the sulfur recovery system. For non-caking coals the pretreatment step can be eliminated. The process can be retrofitted to an existing electric power generation plant. The primary output is a clean fuel gas with 136 B.t.u./s.c.f.

e. Slurry Firing with Cleanup. The size and complexity of conventional equipment requires large land areas for plant construction and involves large capital expenditures, thus making some systems unattractive. By using a coal/water slurry feed and high temperature, dry cleanup of sulfur and particulates in a single vessel a more efficient, clean, economical method of coal gasification is possible.

f. Agglomerating Bed Process. The process consists of two main process vessels. A portion of pulverized feed coal (or char) is burned with air in a fluidized-bed vessel (combustor) under conditions which promote agglomeration of the ash and avoid the emission of particulate matter. This vessel operates under pressure and at temperatures approaching the ash fusion point. The products of combustion are sufficiently free of particulates to permit the gas to be expanded in a gas turbine for recovery of mechanical energy.

Agglomerated ash particles produced in the combustor are transferred from the combustor to a gasification vessel. The gasifier is a steam-fluidized bed and operated at a pressure approximately the same as in the combustor. The hot agglomerated ash releases a portion of its sensible heat in passing through the gasifier. The heat released supports the reaction of pulverized coal, added to the gasifier, with steam to produce CO, H_2, and other carbonaceous gases. These gases are the fuel gas product of the process. The agglomerated ash, after giving up a part of its heat, is pneumatically returned to the burner for reheating.

B. Non-Pilot Plant Projects

1. Cleanup

FY 1974	$ .40
FY 1975	2.00

a. High-Temperature Cleanup with Molten Salt. This project is for development of a fused salt scrubber system for removal of flyash and sulfur compounds from low-B.t.u. fuel gas at high temperatures, in order to meet the stringent requirements for clean gas needed for combustion in a turbine. By cleaning the gas at high temperature as generated, sensible heat is conserved improving overall thermal efficiency.

This process will utilize molten salt scrubbing of the fuel gas at temperatures up to 2100° F for removal of particulates and sulfur compounds. Fuel gas from a fixed-bed gasifier will be scrubbed in a venturi scrubber using molten salt as the working fluid. The molten salt will be recovered in a baffled settling chamber with a demister section, filtered, regenerated and recycled. The program includes a pilot-scale scrubber system and demonstration runs are planned to provide data for design and operation of a scrubber for a 50-megawatt installation preventing corrosion and erosion of the turbine and maintaining environmental contamination at satisfactory levels.

b. High-Temperature Cleanup Using Dolomite. Sorption in a fixed hot bed of dolomite is a technically feasible and promising method for high-temperature removal of hydrogen sulfide from low-B.t.u. gas. The objective of this program is to develop, demonstrate and commercialize this method, including development of optimum regeneration techniques to produce hydrogen sulfide in sufficiently high concentrations to be converted (via the Claus process) to elemental sulfur. This is an ongoing project.

2. Engineering Evaluations

FY 1974	$ .10
FY 1975	1.00

This program is to provide OCR with technical and engineering services directed to the development of commercially attractive processes for converting coal to electric power. The contractor will assist in selecting processes for pilot plant work, evaluate data, project commercial designs and costs, and prepare preliminary designs of demonstration plants. Scope of contract may be modified to embrace additional studies as the program develops.

IV. Advanced Power Systems

The advanced power systems are needed because of the geometric growth of demand for electric power; the need to be able to use high-sulfur coals for electric generation; the shortage of clean fuels to avoid air pollution; the low water requirement to enable electric generation in arid areas of the U.S. where coal is abundant; the reduced coal requirement of high-efficiency methods of generation per kwh; the increased value of leases of public coal lands where water is scarce; the need to conserve low-sulfur coals for metallurgical purposes and export earnings; and the need to avoid undue reliance on imported oil.

Besides MHD, work will be undertaken with alkali metal systems, Brayton cycles, and fuel cell power. Fuel cell development in connection with low-B.t.u. gas has the objective of high efficiency and clean electric generation, with very low water requirement.

Pilot plant and development scale units are planned starting in the late 1970's as each process is completed. Larger scale demonstration of these technologies may be possible for some of these systems in the 1982-85 period.

The objectives of the program are, after theorectical modeling and analysis, to build and test relatively small-sized units. The programs then would logically lead to pilot plants of 25- to 50-MW capacity and ultimately, with MHD for instance, to demonstration plants of perhaps 500-MW capacity. The end objective, of course, is to permit the construction and operation of clean, much more efficient, coal-fired central station powerplants as normal commercial risks.

Except for fuel cell development this program is generally directed toward higher temperature systems for the generation of electricity. Following the laws of thermodynamics, everything else being equal, the higher the operating temperature the higher the efficiency in the conversion of the heat energy from burning coal into electric energy. Theoretically, it seems possible to eventually raise this thermal efficiency from the present ceiling of around 40 percent to 50 percent, and eventually 60 percent. This would have a highly beneficial effect in conserving energy resources, as well as drastically reducing thermal pollution and the cost of controlling undesirable emissions from powerplants.

Because of higher temperatures and, in some cases, high pressures, there are many formidable problems of materials and equipment design which remain to be solved. While the fuel cell temperatures are not as high as in MHD, for instance, the manufacturing and materials requirements pose major development problems.

A. Pilot Plants

None

B. Non-Pilot Plant Projects

1. Magnetohydrodynamic (MHD) Generation

FY 1974	$ 7.45
FY 1975	7.50

The proposed funding for MHD for FY 1975 includes R&D arising out of the technological exchange agreement with the Soviet Union. Meetings are being held in the U.S. and U.S.S.R. on super-conducting magnets and materials of construction.

OCR and cosponsors (Electric Power Research Institute, National Science Foundation, and several electric utilities) are negotiating an extension of the current Avco contract which expires early in 1974. Technological R&D will be continuing on various materials of construction and components.

The OCR studies are designed to evaluate alternatives such as type of generator, the oxidant to be used in the combustion system, and the relative amount of plant power to come from the MHD generator and a convenient steam plant to be used in combination. There is need for an experimental program that would answer questions concerning superconducting magnets, plasma properties, materials of construction, channel geometry, generator type, variations of efficiency as a function of seed or other factors, and experimental combustion of coal, char, and possibly coal-gas.

This new technological development, if research is ultimately successful, involves generation without rotating parts. Coal is fired at relatively high pressure and the resulting gases are expanded through a duct at high velocity. The gases move through a magnetic field surrounding the duct, resulting in generation of an electric current. Electrodes on the wall of the duct convey the current that is generated.

In MHD generation the chemical energy in the coal is converted to heat in the gas, and the expanding gas provides mechanical energy. This in turn is converted to electric energy as the gas flows through the duct. To be electrically conductive the gases must attain very high temperatures--upward to 4,000° F. Conductivity of the gas is improved by the injection of "seed" materials, such as potassium or cesium.

MHD for electric power has potential for much higher efficiency ratios (up to 55 or 60 percent versus conventional electric power generation in thermal plants of 40 percent), with less thermal energy to dispose of through cooling. MHD power systems will require substantially less cooling water, thereby enabling reduced thermal water pollution, and usability in arid areas (particularly in the West where coal is abundant and water is scarce). Research will be included to avoid air pollution.

2. Other Advanced Power Systems

FY 1974	$ 1.85
FY 1975	3.90

a. Alkali Metal Topping Cycle. Binary cycles in which a high-temperature cycle is used to top a lower temperature cycle is of great interest

because of the overall plant efficiencies possible. The alkali metal cycle, in particular, is of interest because of its inherent adaptability to coal-fired boiler applications. The primary objective of this project is to incorporate the liquid metal topping cycle with matching steam cycle into a full commercial-size powerplant. Parameters for the major components of the liquid metal cycle will be developed through component design studies, analyzing possible trade-offs between performance and cost. The program will develop first a PDU size plant and from the technology developed progress through a 200-MW_e demonstration plant and then on to a 1200-MW_e commercial powerplant.

b. Closed Brayton Cycle. This project is for developing adaptations and improvements of the closed Brayton cycle. In its simplest form, the closed Brayton cycle has the compressor and turbine on the same shaft, and the difference between the work done by the turbine and that required by the compressor is the net work output. Efficiency increases are obtained from increasing the turbine inlet temperature and the compressor pressure ratio, and raising the compression and expansion efficiencies of the compressor and turbine. The engine resulting has advantages in efficiency, size, weight and first cost over steam turbines which it would replace in electric power generating systems. The combination of the Brayton cycle with low-B.t.u. gasification and pressurizing gas turbines permits utilization of coal as the primary fuel in an environmentally acceptable fashion. The Brayton cycle can be air-cooled with modest penalty to relieve thermal pollution of rivers and oceans and remove site dependency on access to cooling water. System evaluation and small scale component development and testing will take place in FY 1975.

c. High-Temperature Fuel Cell Project. For solid electrolyte fuel cells to be used to generate sizable quantities of power (power generation efficiencies of 80%), overall life of 5 or more years is required. High efficiencies have been achieved for cell and components, but extensive studies must be performed to demonstrate a suitable length of cell life. Additional research work is required to develop a suitable support for multiple thin film cells and to find low cost techniques for construction of cells and cell interconnections. Concurrently, data must be generated on candidate materials of construction that are capable of protecting the fuel cell batteries from the corrosive and erosive effects of the gasification bed.

3. Engineering Evaluations

FY 1974	$ .30*
FY 1975	1.30

The contractor is providing broad-based engineering services on the overall program directed toward development of commercially attractive, advanced systems (MHD, etc.) for conversion of coal to electric power in an environmentally acceptable fashion.

Engineering designs and cost estimates are being prepared for processes and process variations, projecting from these figures a final cost figure for the

* Part of $7.75 million appropriated for MHD.

product-electricity. (Additionally, this work will facilitate termination of projects on completion of work, or if they do not indicate sufficient potentiality.)

Supporting research is undertaken on problem areas.

V. Direct Boiler Combustion

This program has a high potential for early and large impact to meet urgent U.S. energy needs. Much demand for liquid and gas fuel (both imported and domestic) can be avoided if technology is developed for direct use of higher sulfur coals for electric generation by methods which can meet ecological requirements, and which are readily adaptable to existing power systems. If pursued according to proposed schedules, this program can provide substitute energy for approximately 10 percent of the projected petroleum imports required in 1980 and greater percentages thereafter.

The scope of this program is to develop both atmospheric and pressurized systems of burning coals of all degrees of rank and quality in fluidized-bed combustors for the generation of steam and power. The use of low-sulfur coals for power generation (in response to air pollution controls) has been accompanied by problems of slagging in the high-temperature boilers, and by reduced efficiency of precipitators. Fluidized-bed boilers have been under development by an OCR contractor for several years, and these can operate at low temperatures so as to permit the use of low-sulfur coals without slagging. This work is being expanded to include other antipollution research and improved heat-transfer technology. At a later date research may be incorporated for higher pressure fluidized-bed boilers. The OCR program for nonpolluting combustion also is beginning to include desulfurizing high-sulfur coals prior to combustion.

a. Atmospheric System. An atmospheric pressure coal-fired fluidized-bed boiler having a capacity of 7,000 pounds of steam per hour has been successfully operated. Furnace temperatures are approximately 1600° F, well below the temperatures at which slagging conditions can be created. When limestone or dolomite is injected into the fluidized bed, it captures up to 86 percent of SO_2.

The dolomite can be regenerated and reused. For the industrial market, fluidized-bed boilers offer promise for the use of coal in compliance with environmental problems. For the elctric utilities, such boilers offer promise of decreased capital and maintenance costs while keeping coal in this important market. A scaleup of effort is needed to bring the system to the point of commercial demonstration.

The technology involved in the atmospheric pressure system is the more advanced at the present time. Coal sized at minus 1/4 inch is burned in a bed of inert ash and limestone or dolomite which is fluidized (held in suspension) by the injection of air through the bottom of the bed at controlled rates. Temperature of the bed is about 1500° F, a temperature at which very low quantities of NO_x are formed. The limestone or dolomite reacts with SO_2 to form a solid sulfate material which can be disposed of as a dry solid waste together with the ash or flyash or rejuvenated with the concentrated SO_2 converted to elemental sulfur or sulfuric acid or collected in a wet scrubbing process.

The objectives of an optimized atmospheric pressure program are to build and operate a 30-megawatt atmospheric pilot plant by 1975 while proceeding concurrently with design and construction of an 800-megawatt demonstration plant by 1977. Under this program one or more commercial plants could be in operation by the end of 1978 if performance warranties of the first units by the boiler manufacturer can be eliminated.

b. Pressurized System. Additional research contemplated incorporates use of pressurization of the fluidized-bed boiler as a means of potentially effecting a major reduction in the cost of power generation. This research will be performed by utilizing and modifying existing equipment of a contractor at modest cost.

The technology for the pressurized system is similar to the atmospheric system except the coal must be injected into a pressurized (10 to 15 atmospheres) combustion chamber and the hot exhaust gas is used to drive a gas turbine rather than being exhausted to the air. This results in economies of size and efficiency, and leads to application in other combined power cycles.

Objectives for the pressurized program are similar to the atmospheric, except that developmental problems are greater and more complex, and the first commercial units would be at least two years further down the road. Limited tests of American coals were performed in a 5-6 atmospheric pressure test unit at Leatherhead, England.

A. Pilot Plant Projects

1. Atmospheric

FY 1974	$ 8.20
FY 1975	15.50

a. Fluidized-bed, 30-MW. This ongoing project is for construction and operation of a 30-megawatt atmospheric pilot plant to be installed on an electric utility power system. Design will be completed in FY 1974; procurement of components has been started, and construction subcontract will be awarded.

b. Fluidized-bed, 800-MW. This project is for the detailed design of a prepackaged 800-megawatt atmospheric unit to start in FY 1974, and the start of long-lead components procurement and site selection studies.

2. Pressurized

FY 1974	$ 4.80
FY 1975	17.30

a. Fluidized-bed, 30-MW, Steam Drive. This research project is directed to the use of heat transfer to make steam to drive a turbine. It is a pressurized fluidized bed of 30-megawatt size.

b. Fluidized-bed, 3-MW, Hot Air Drive. This project is for the development of a 3-megawatt combined cycle pilot plant using excess air and high-temperature gas from a pressurized fluidized-bed boiler to drive a turbine. The project includes construction of a demonstration

plant for commercial application. The existing pilot plant (trash burner) will be converted to buring coal and the total system will be operated.

c. Fluidized-bed, Advance Power Cycle. This project is for development of a fluidized-bed boiler incorporating alkali metal topping for advance power cycle applications. Such advance power cycles include magneto-hydrodynamic (MHD) power generation, Brayton, and Organic Rankin Bottoming cycles. It is planned to design a pressurized fluidized bed, potassium boiler for a 200-MW pilot plant, and the preparatory studies include analysis of process performance, components reliability, materials compatibility, and economic evaluation.

d. Fluidized-bed, 500-MW, Demonstration. This project is for detailed design of a prepackaged pressurized unit to start in FY 1974, and the start of long-lead components procurement and site selection studies.

B. Non-Pilot Plant Projects

FY 1974	$ 1.20
FY 1975	1.20

Lab and Process-Development-Unit Research

This research is to support the development programs for fulidized-bed boilers. It will develop and experimentally validate an analytical model of the elemental processes of such boilers to establish a better understanding of the fundamental processes in order to achieve optimized designs, including their use for advance conversion systems such as the potassium topping plant and closed helium gas turbine cycle. These techniques have as their objective further reduction of capital cost per kilowatt, improved fuel utilization, and cleaner air.

VI. Advanced Research and Supporting Technology

This work will benefit the Office of Coal Research programs on the gasification and liquefaction of coal and on clean electric generation. In addition, the results obtained in the applied programs will indicate exactly where there is need for additional advanced and supporting research.

The useful portion of coal for combustion or conversion to clean fuels and organic chemical byproducts consists essentially of polycyclic hydrocarbon fragments. Although conversion of coal to pipeline quality gas or methane (the simplest hydrocarbon) can be accomplished in one step by direct hydrogenation (after extensive purification), the yield is generally low. Accordingly, current processes under investigation involve several simultaneous and consecutive reactions, including steam-coal reforming, hydrogenation, shift conversion, and catalytic methanation. Analogously, current coal liquefaction processes under investigation involve several steps, such as solvent extraction, hydrogenation, hydrocracking, etc. The products in this case are complex mixtures of hydrocarbons and require further processing to produce such liquid fuels as gasoline, diesel fuel, and jet fuel. Similarly, conversion of coal to clean electric power,

by improved combustion and particularly by combined power cycles, has many needs for research for improved processes, materials of construction, and methods of sulfur removal.

These stated problems provide opportunities to improve the technology by means of the following four programs:

1. Advanced utilization process research and technology, ranging from extraction through combustion of the solid fuel.

2. Advanced coal conversion process research and technology to provide clean gaseous and liquid fuels.

3. Advanced processes for producing electric power cleanly and efficiently.

4. Supportive research studies, such as on the materials of construction for gasifiers.

The first three areas have as their objective the development of new and improved processes and technology. Included is the development of new and improved technology for ash and sulfur removal at various stages in the direct utilization of coal or its conversion to clean fuels so that the processes being developed meet standards of EPA.

The fourth area has as its objective supportive research studies to develop the necessary auxiliary information and technology to provide support to the more applied research and engineering programs.

Funding requirements for the advanced research and technology objectives are:

A. Pilot Plant Projects

None

B. Non-Pilot Plant Projects

1. Advanced Coal Conversion Processes — FY 1974 $ 4.500; FY 1975 $13.887

a. For gasifiers: multistage fluidized bed; fast, high-temperature coal pyrolysis; fast fluidized bed, etc.

b. For catalytic methanation

c. For liquefaction processes: extractive-coking; stirred-tank extractive hydrogenation; coal oil refining; fast fluidized-bed catalytic hydrogenation, etc.

d. For improved hydrogen production

e. For conversion of gas to liquid fuels: methanol fuels; hydrocarbon fuels and byproducts.

2. Advanced Utilization Processes — FY 1974 $ 0.700; FY 1975 1.500

(a) Extraction; refining and conveyance; (b) For combustion electric generation; (c) For sulfur-removal processes from coal, coal-derived fuels, and wastes.

3. New and Improved Electric Power Production — FY 1974 $ 0.200; FY 1975 1.500

(a) For improved fuel cells; (b) For combined cycles.

4. Advanced Supportive Research — FY 1974 $ 0.700; FY 1975 2.250

(a) For materials; (b) For waste disposal and water release processes; (c) For physical chemical measurements, such as kinetics.

VII. System Studies — FY 1974 $ 2.50; FY 1975 2.50

A number of system studies of high priority must be made in order to broaden the knowledge base and to establish quantitative criteria for evaluating competing areas of potential R&D effort, so that such R&D effort may be pursued in relation to national needs, and also for providing the emerging conversion industrial developments with the economic, social, and environmental basis for choosing between alternate systems.

Study will be made to assess economic, societal, and land use problems relating to large scale coal conversion plants that produce gas, oil, and power. The value of synthetic coal liquids, to a refinery, will be obtained by using the computer model of typical refining systems. Alternate transportation costs for liquids, gases, and electricity from typical coal plants will be determined and their effect on potential markets will be estimated. Regional energy markets will be examined to determine how products from the typical coal conversion plants might change as a function of geographical location of the plant. Computer models of alternate total systems will be developed to assist in assessing the total coal conversion program.

Various clean fuels from coal need to be analyzed within the context of the national energy system; taking account of fuel substitution, relative prices between various fuel forms and the state-of-the-art of various technologies. These analyses will include consideration of whether gaseous or liquid products or a mix appears to be most cost effective, whether the gaseous products should be low- or high-B.t.u. quality, and whether the liquid products should be a synthetic crude oil or a more optimal form such as methanol might be desirable.

Major studies should be undertaken on the impact of developing various Eastern and Western surface and deep coal deposits (e.g., what this might mean to transportation requirements, population shifts, degradation of the environment, etc.)

The basic framework does not exist for rational R&D strategic and technical planning in the area of increased usage of coal, and this needs to be developed. It is essential that an overall systems evaluation capability be established using a common set of rules on technological success and failure probabilities, environmental impact, cost of capital pricing policies, etc., in order that the

Federal Government may have the framework in which to evaluate various technologies in early stages of development.

VIII. "Pioneer Plant" Project — FY 1974 $ --; FY 1975 42.10

This aggressive new program will make use of private sector plants to produce refined fossil fuels which are under construction or in operation, thereby multiplying the effectiveness of Federal research funds. The major purpose of this program is to share the risk with private developers in taking old technology, upgrading it to be consistent with new safety and environmental requirements, and putting it into use with the Federal investment covering only that part of the process which involves significant technical risks. It is anticipated that announcement of this program will attract substantial cosponsorship funding from the private sector, and OCR expects to use a competitive evaluation procedure in choosing which proposal to accept.

At the present time, a number of processes involving existing low-B.t.u. gasification, fairly large-scale novel coking and certain liquefaction processes are under development by the private sector. Under this "pioneer plant" program, OCR would make use of these facilities to "piggyback" experiments of interest to OCR and the Nation. For example, if a gasification system is in operation without an effective cleanup device, OCR would provide the research activity to make the plant environmentally acceptable (and the research results would be published for application elsewhere as well). Also, where fixed-bed gasifiers may be in operation, an OCR-developed gasifier may readily be tested without the expense of building the remainder of the system. Lurgi gasifiers and other low-B.t.u. gasifiers are under construction or being contracted for; a Fischer-Tropsch liquefaction process may be used; and methanol formation from synthesis gas is a distinct possibility.

This is an aggressive program which will accelerate research and development efforts related to commercializing various processes for conversion of coal to clean fuels, and accelerate the implementation of this technology. In addition, the knowledge gained from participating in commercialization of some technologies will further assist OCR and the Bureau of Mines in defining the research question that have to be addressed in their basic research and supporting technology programs to assure that second generation technology, under development and described earlier, will be able to reach the commercial stage.

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Personnel Summary

	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions	45	110	222
Full-time equivalent of other positions	2	10	10
Average paid employment	41	85	205
Average GS grade	11.3	10.8	10.7
Average GS salary	$20,245	$19,729	$19,708

Itemization of Estimate

Department of the Interior
Appropriation Title: Salaries and Expenses — Office of Coal Research

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) Decrease (-)
Program and Financing: Total obligations	$42,914,299	$124,779,000	$283,400,000	$+158,621,000
Unobligated balance, start of year	-803,445	-1,379,000	---	+1,379,000
Unobligated balance, end of year	1,379,146	---	---	---
New obligational authority appropriation	43,490,000	123,400,000	283,400,000	+160,000,000
Object classification:				
11 Personnel compensation	604,829	1,633,000	4,061,000	+2,428,000
12 Personnel benefits	48,990	139,000	345,000	+206,000
21 Travel and transportation of persons	74,179	170,000	447,000	+277,000
22 Transportation of things	1,483	60,000	80,000	+20,000
23 Rent, communications and utilities	21,021	150,000	298,000	+148,000
24 Printing and reproduction	24,095	130,000	334,000	204,000
25 Other services	42,115,656	122,379,000	277,584,000	+155,205,000
26 Supplies and materials	8,586	38,000	77,000	+39,000
31 Equipment	15,460	80,000	174,000	+94,000
Total obligations	42,914,299	124,779,000	283,400,000	+158,621,000

DEPARTMENT OF THE INTERIOR

Bureau of Indian Affairs

HIGHLIGHT STATEMENT

The Bureau of Indian Affairs proposes a budget of $634.7 million for fiscal year 1975, of which the largest single item is $219.0 million for Indian Education. Seventy million dollars of the total request is for the 1975 payment to the Alaska Native fund as authorized under the Alaska Native Claims Settlement Act, Public Law 92-203, enacted December 18, 1971.

The Bureau's budget request for fiscal year 1975 is presented in a new appropriation structure which more clearly and adequately describes the activities and functions of the Bureau and its organizational structure. In keeping with this Administration's key policy which allows concerned Indians to assume the control and operation of Federally funded and administered programs, the new proposed structure includes a line item as a subactivity in the operation of the Indian Program appropriation entitled "Direct Indian Operations" for all programs with the exception of Trust Responsibilities and Services -- Indian Natural Resource Rights Protection and Real Estate and Financial Trust Services. There will remain implicit in this assumption of operations policy the fact that the Indian tribes, organizations, or individuals will make the determination of what they wish to assume and when they will do so. Also, as in the past, the right to return control and operation of programs to the Bureau is available at all times and in all instances. Bureau officials will act as brokers and never as salesmen.

This subactivity contains estimates of funds to be granted directly to or contracted directly with individual Indians, Indian tribes, or Indian organizations. In past years these funds were included as a part of regular program estimates. In addition, this new subactivity includes funds transferred from each program which will be available for payment of overhead or indirect costs incurred by Indian tribes or Indian organizations in contracting with the Federal Government for the provision of programs and services normally provided by Federal employees. This transfer of funds is based upon attrition of employees in programs to be contracted and, therefore, does not reduce in any way total program funds available. This will alleviate the concern expressed recently by several tribes that it costs them tribal and program dollars to do business with the Bureau.

Although funds are specifically earmarked for these purposes in this subactivity, in keeping with the policy of Indian self-determination, should the tribes or individuals elect not to enter into contractual arrangements, funds will be used by the Bureau to carry out programs in the same manner as in the past, which assures that services will in no way be terminated or diminished. This assurance to the Indian people is absolutely essential if this new system of delivery of services is to be successful and, therefore, has been explicitly spelled out in the "Program and Performance" statement of each appropriation.

Indian involvement and participation in the program planning decisions of the Bureau have again been stressed and upgraded. Local Indian priorities for the fiscal year 1975 Bureau budget were determined on an agency-by-agency basis by means of a priority analysis system. These priorities have been used to help develop the distribution of fiscal year 1975 funds down to the local level on a program-by-program basis. To familiarize Indian leadership with the Federal

budget process in general and the Department and Bureau processes in particular, a budget formulation and program planning workshop was developed for use at the agency level as a preliminary step to the fiscal year 1976 budget cycle. The workshop's major emphasis is to assist Indian leaders in establishing local priorities relating to the Bureau's programs under constrained funding levels.

The funds requested will provide for:

Indian Education - $219.0 million. Among other efforts the requested funds will provide program assistance for approximately 100,000 Indian students who will be attending public schools. Monies are needed to provide for special educational projects such as special English language teachers, bicultural classes, kindergartens, and school-home coordinators.

Over 53,000 Indian youth will be attending Federal schools with an additional 4,000 being provided dormitory boarding services while attending public schools in communities near Indian reservations.

Under the Career Development Program Indian students are enrolling in colleges and universities in greater number each year. During fiscal year 1975, scholarship grants will be provided for approximately 14,700 Indian men and women as compared with 13,500 in fiscal year 1974. The majority of these students come from homes with income below today's national poverty level. About 11,000 Indian adults will be provided adult education services while another 8,000 will be assisted through adult vocational training activities throughout the United States.

Indian Services - $96.3 million. The major emphasis of the Indian Services program in fiscal year 1975 will be aid to tribal governments and social services. The proposed increase of $2.0 million to a total of $10.9 million in aid to tribal governments will permit increased activity in the tribal government development program, as well as increasing the funding available for tribal comprehensive planning.

The proposal of $63.7 million for fiscal year 1975 social services represents an increase of $3.4 million over fiscal year 1974. This increase is necessitated by the increased unit costs for assistance to an estimated general assistance caseload of 75,000 persons and a child welfare caseload of 3,600 children. The tribal work experience program will be carried on by 31 tribes in fiscal year 1975 and will benefit an estimated 4,525 participants.

The fiscal year 1975 law enforcement budget of $8.8 million will provide services to over 300,000 Indian people on 87 reservations in 17 states where local authorities have not assumed civil and/or criminal jurisdiction.

The Bureau's fiscal year 1975 budget calls for $12.9 million for housing. While the bulk of new home construction on reservations is the responsibility of the Department of Housing and Urban Development under separate appropriations, Bureau of Indian Affairs' programs will account for 500 new homes and 4,400 renovations.

Tribal Resources Development - $57.6 million. In fiscal year 1975, $57.6 million is requested for the development of tribal resources, an increase of $6.3 million over fiscal year 1974. Primary efforts will be directed toward increased Indian employment and income; an intensified program for the inventory, conservation, development and utilization of natural resources; and improved road maintenance services.

Assuming continued growth in the Nation's economy, the $2.3 million increase in business enterprises, credit, and direct employment, along with efforts in other program areas, is expected to add about 5,000 man-years to Indian employment, with 800 resulting from placement services and additional contracts which provide on-the-job training.

An additional $1.3 million over the fiscal year 1974 level for forestry and agriculture will be used to strengthen conservation and development efforts on Indian lands and will provide urgently needed technical services on leasing and harvesting arrangements to assure optimum returns to the Indian community. There will be $1.0 million to begin a comprehensive inventory of energy resources, and $0.5 million to improve obligatory Federal maintenance services in irrigation projects where the current maintenance level is resulting in deteriorating facilities and reduced water deliveries.

The $1.2 million increase for road maintenance will provide increased maintenance services of approximately $50 per mile for the Indian reservation road network of approximately 22,740 miles. This will improve useability and reduce road deterioration.

Trust Responsibilities and Services - $17.9 million. The request of $17.9 million for fulfilling the Government's trust responsibilities in fiscal year 1975 provides for an increase of $3.4 million over fiscal year 1974. Primary emphasis will be directed to protecting Indian rights in water and other property, and in strengthening real estate and financial management services.

An increase of $1.0 million for water rights protection work will provide for initiating 35 additional water studies, for completing 34 water use plans now underway, and for filing or appealing 8 additional litigation cases. In addition, programs will be strengthened to assure that environmental quality standards are being maintained.

A $2.4 million increase for trust services will provide urgent backlogged land appraisal, lease, and management services, increasing the number of appraisals by 2,600, and land conveyance, rights-of-way, and other lease services by over 17,000. The total number of leases expected to be in effect exceeds 95,000. In addition, financial management and accounting services will be strengthened for the estimated $465.0 million in tribal investments and individual Indian accounts being serviced.

General Management and Facilities Operations - $63.0 million. Included in the fiscal year 1975 budget request are funds to provide for the general management and administration of the Bureau ($6.1 million); annual program planning and development at the reservation level ($3.0 million); safety management and employee compensation ($1.7 million); and the rental, operation, repair and maintenance of physical facilities in support of Bureau programs ($52.2 million). Included are funds transferred to the Department of Labor for employee compensation claims; and to the General Services Administration for space owned or leased by them which is being used by the Bureau.

Construction (Buildings and Utilities) - $27.4 million. The construction program in fiscal year 1975 includes funds for 16 additional kindergarten classrooms and 16 related staff quarters; one day school building at Diomede, Alaska; completion of Grey Hill High School, Arizona (renamed Tuba City High School); facilities at Haskell Indian Junior College, Lawrence, Kansas; an administration building for the Navajo Indian Irrigation Project, New Mexico; and funds to cover inflated

construction costs at Navajo Community College, Tsaile Lake, Arizona. Funds will also provide for design drawings for future projects and the purchase of equipment for facilities now under construction.

Irrigation Construction - $24.5 million. The proposed budget estimates for irrigation systems for fiscal year 1975 provides $17.2 million for the Navajo Indian Irrigation Project located in New Mexico and $7.3 million for other Indian irrigation projects and related power systems.

Road Construction on Indian Reservations - $59.0 million (Liquidating Contract Authority). The Bureau of Indian Affairs will continue to emphasize in fiscal year 1975 the need of developing adequate road systems on Indian reservations. The program will provide for grading of 446 miles, paved surfacing of 577 miles and gravel surfacing of 148 miles.

Alaska Native Claims - $70.0 million. Included in the fiscal year 1975 budget request is $70.0 million for the Alaska Native claims. These funds will be used for the settlement of land claims of Alaska Natives as authorized by P.L. 92-203, December 18, 1971. This settlement will be accomplished in conformity with the real economic and social needs of the Natives and with their maximum participation in decisions affecting their rights and property. Funding to date has been $12.5 million in 1972, $50.0 million in 1973 and $70.0 million in 1974. The Act requires that the claims be paid out in 11 years.

Navajo-Hopi. In 1962 a court determined that 1,822,082 acres of the Executive Act (1882) was owned jointly by the Navajo and Hopi. In 1972 the court ordered the Navajo tribe and the United States Government to reduce Navajo livestock to one-half the 1964 grazing capacity and to make a new carrying capacity survey, and order the Government to submit plans to implement the order. These plans were submitted and approved by the court.

A Flagstaff Office to implement the terms of the court order in the joint-use area has been established. This office will supervise grazing, issuance of grazing permits, removal and transportation of animals, permits for new construction of any kind, and the maintenance of law enforcement, including a special court and police. Funds for carrying out the court order including range capacity survey, range improvements and fencing, and other necessary activities for the control of grazing are estimated to be $1.5 million in fiscal year 1974. Funds will be needed to continue these activities in fiscal year 1975, in addition to the operation of a judiciary and police system, in order to comply with the court order.

Federal Government Obligations. The Federal Government holds title, in trust, for 40.0 million acres of tribally-owned land and 10.3 million acres of individually owned land.

Population. The United States Census for 1970 reports there are 792,730 Indians and 34,378 Aleuts and Eskimos in the United States. This is a total of 827,108 Americans claiming Indian or Alaska Native ancestry. In March 1973, the Bureau of Indian Affairs estimated about 543,000 Indians living on reservations and nearby, including all rural California Indians in counties containing trust land.

Program Direction. The Administration will continue to provide the American Indian the opportunity and assistance to live in prosperity, dignity and honor, and to help share and determine their destiny through their participation and involvement. Continued emphasis will also be given to development of commercial and industrial potentials for increased Indian employment and income.

DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS
(In thousands)

Comparative Statement of 1974 Appropriation and 1975 Budget Estimate

Appropriations and Activities	Fiscal Year 1974 Appropriation	Pay Cost Supplemental	Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
OPERATION INDIAN PROGRAMS:					
1. Education	190,420	8,566	198,986	219,016	+20,030
2. Indian Services	92,476	1,442	93,918	96,304	+ 2,386
3. Tribal Resources Development	49,156	2,169	51,325	57,609	+ 6,284
4. Trust Responsibilities and Services	13,630	814	14,444	17,885	+ 3,441
5. General Management and Facilities Operations	51,339	2,347	53,686	62,993	+ 9,307
Total	397,021	15,338	412,359	453,807	+41,448
CONSTRUCTION:					
1. Irrigation systems	21,585	- - -	21,585	24,522	+ 2,937
2. Construction of Buildings and Utilities	33,022	- - -	33,022	27,353	- 5,669
Total	1/ 54,607	- - -	54,607	51,875	- 2,732
ROAD CONSTRUCTION:					
1. General Raod Construction-Approp.	43,000	- - -	43,000	59,000	+16,000
(Obligational Authority)	(57,200)	- - -	(57,200)	(60,200)	(+ 3,000)
(Budget Authority)	(150,000)	- - -	(150,000)	(75,000)	(-75,000)
MISCELLANEOUS APPROPRIATIONS:					
1. Alaska Native Claims	70,000	- - -	70,000	70,000	- - -
TOTAL APPROPRIATIONS	564,628	15,338	579,966	634,682	+54,716

1/ Excludes transfer of $116,000.

DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS

Operation of Indian Programs

Appropriation, 1973	$398,123,000	
Total appropriation, 1973		$398,123,000
Appropriation, 1974	394,656,000	
Supplemental appropriation, 1974	2,365,000	
Second supplemental appropriation, 1974	15,338,000	
Contract suthority	707,000	
Total appropriation, 1974		413,066,000

Summary of Increases and Decreases, 1975

	Base for 1975	Increase 1975	
Education	$199,693,000	$ +19,323,000	
Indian Services	93,918,000	+ 2,386,000	
Tribal Resources Development	51,325,000	+ 6,284,000	
Trust Responsibilities	14,444,000	+ 3,441,000	
General Management and Facilities Operations	53,686,000	+ 9,307,000	+40,741,000
Net Increase, 1975			+40,741,000
Budget Estimate, 1975			453,807,000

Operation of Indian Programs

Analysis by Activity

	Fiscal Year 1973	Fiscal Year 1974			
	Amount Available	Total Appropriation	Pay Cost Supplemental	Transfers	Amount Available
1. Education.....	$191,341,446	$191,127,000	$8,566,000		$199,693,000
2. Indian Services.....	81,493,635	92,476,000	1,442,000		93,918,000
3. Tribal Resources Development..	51,187,498	49,156,000	2,169,000		51,325,000
4. Trust Responsibilities.....	13,117,120	13,630,000	814,000		14,444,000
5. General Management and Facilities Operation.....	52,004,555	51,339,000	2,347,000		53,686,000
Contract Authorization....	-271,192	-	-		-
Applied to Contract Authorization.....	793,492	-	-		-
Unobligated balance lapsing...	8,456,446	-	-		-
Total.....	398,123,000	397,728,000	15,338,000		413,066,000

Operation of Indian Programs

Activity	FY 74 as Appropriated	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
EDUCATION		$191,341,446	$199,693,000	$219,016,000	$19,323,000
Federal facilities	(146,488,800)				
Assistance to Public Schools	(25,352,000)				
Higher Education	(22,756,000)				
Adult Vocational Training	(19,035,400)				
Adult Education	(2,155,100)				
INDIAN SERVICES		81,493,635	93,918,000	96,304,000	2,386,000
Community Development	(210,500)				
Agricultural Extension	(2,350,200)				
Tribal Operations	(4,697,400)				
Comprehensive Planning	(1,044,600)				
Welfare Services	(60,736,300)				
Housing Improvement	(10,432,900)				
Housing Development	(2,621,600)				
Maintaining Law and Order	(12,325,600)				
Repair and Maintenance, Buildings and Utilities	(500,000)				
TRIBAL RESOURCES DEVELOPMENT		49,643,078	51,325,000	57,609,000	6,284,000
Direct Employment (Incl. OJT)	(17,108,100)				
Outdoor Recreation	(362,300)				
Industrial & Tourism Dev.	(2,255,900)				
Development of Indian A&C	(720,400)				
Credit Operations	(2,418,100)				
Road Maintenance	(6,892,600)				
Forestry	(7,165,400)				
Range Lands	(4,153,300)				
Fire Suppression and Emergency Rehabilitation	(800,000)				
Soil & Moisture Conservation	(9,014,900)				
Operation, Repair & Maint. of Indian Irrigation Systems	(1,624,900)				

Operation of Indian Programs (con.)

Activity	F. Y. 74 as Appropriated	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
TRUST RESPONSIBILITIES.....		$14,661,540	$14,444,000	$17,885,000	$3,441,000
Indian Water Rights	(1,777,600)				
Real Property Management	(8,560,200)				
Real Estate Appraisals	(2,241,100)				
General Trustee Services	(1,588,000)				
Environmental Quality Services	(527,200)				
GENERAL MANAGEMENT AND FACILITIES OPERATION.....		52,004,555	53,686,000	62,993,000	9,307,000
General Administrative Exp.	(5,628,200)				
Management Evaluation	(306,300)				
Reservation Programs	(2,699,600)				
Employee Compensation	(717,000)				
Safety	(-)				
Plant Operations	(-)				
Repair and Maintenance, Buildings and Utilities	(25,798,500)				
Contract Authorization.....		-271,192	-	-	-
Applied to Contract Authorization.....		793,492	-	-	-
Unobligated Balance Lapsing.....		8,456,446	-	-	-
Total.....		398,123,000	413,066,000	453,807,000	40,741,000

OPERATION OF INDIAN PROGRAMS

1. Education

Subactivity	FY-1973 Amount Available	FY-1974 Amount Available	FY-1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
A. School Operations.....	$115,290,446	$122,177,000	$119,234,000	$- 2,943,000
B. Assistance to Public Schools.....	17,560,000	16,205,000	18,805,000	+ 2,600,000
C. Career Development.....	7,561,000	12,917,000	13,302,000	+ 385,000
D. Direct Indian Education Operations.....	50,990,000	48,394,000	67,675,000	+19,281,000
Total.....	191,341,446	199,693,000	219,016,000	+19,323,000

	Bureau Assistance Programs		Contracts and Grants to Indians		Total Program		
	FY-1974	FY-1975	FY-1974	FY-1975	FY-1974	FY-1975	
A. School Operations.....	122,177,000	119,234,000	8,364,000	19,969,000	130,541,000	139,203,000	+ 8,662,000
B. Assistance to Public Schools.....	16,205,000	18,805,000	9,147,000	9,147,000	25,352,000	27,952,000	+ 2,600,000
C. Career Development....	12,917,000	13,302,000	30,883,000	38,559,000	43,800,000	51,861,000	+ 8,061,000
Total.....	151,299,000	151,341,000	48,394,000	67,675,000	199,693,000	219,016,000	+19,323,000

A. School Operations: FY-1974, $130,541,000; FY-1975, $139,203,000; increase $8,662,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) +3,862,000	-	-		To provide adequate operating funds for the Indian education program.
(2) +4,800,000	-832	139,203,000	7,151	To provide for program improvements in school operations.
+8,662,000	-			

Cost Factor Involved in Increases

(1) Cost of living increases averaging 10% of the total non-personnel costs. (53,000 students; 4,000 provided dormitory; no change in FY-75).

Need for Increase:

(1) An increase of $3,862,000 is requested to offset cost of living advances to date in the Indian school program. The cost of food has risen approximately 15% resulting in an increased cost of $1,500,000 to the education program. The cost of textbooks has risen 10% over the past year. Other teaching aid (soft cover) have risen 11%. Cost of living increases in all goods and services other than food total $2,362,000 or an average of approximately 8%.

Without increases to offset rising costs, Indian schools will be faced with curtailment of items directly affecting the well being of children. They will be forced to reduce the level of textbooks and other instructional materials, dormitory supplies and materials, and food, since these are items in which there is some flexibility. The Indian children who will be affected are for the most part those who live in remote areas which are not served by the public school system. Their communities lack the public utility and recreational facilities that exist in most American communities. The conditions of isolation and poverty found in these areas place the children at a distinct disadvantage in school achievement. To help overcome these disadvantages there is need for higher levels of teaching materials and equipment and for more supplementary dormitory reading materials, recreation supplies, etc. The additional amount requested is needed to avoid curtailment in such program offerings.

(2) An increase of $4,800,000 is requested to remove program deficiencies and to provide program improvements in general throughout the Indian education program. For example, a program deficiency in the area of providing boarding school students with adequate clothing and personal effects has been increasingly articulated over the past two years. Only $5 per student was allocated last fiscal year for all clothing and personal effects. Other similar deficiencies have been identified.

Program improvements include the need for more attention to the special needs of Indian children as identified by the local school and community in choosing options available to them in control of the local education programs. This will necessitate financial assistance to support meaningful involvement and to carry out local determinations with respect to the thrust and direction of the education program.

Program of Work:

Under the Snyder Act of November 2, 1921 (25 USC 13), the School Operations program provides for the operation of boarding schools, dormitories, and day schools for Indian youth at the kindergarten, elementary, high school, and post-high school levels. A pilot program for pre-kindergarten children is presently underway at two locations.

Boarding schools provide instruction at the elementary, high school, and post-high school levels. Enrollment is made up of those Indian children who do not have suitable education opportunities in their home communities, who are orphans, or who, for social reasons, must be educated away from their homes. These schools must also provide a home living program to assist students in making social and cultural changes necessary for successful school adjustment.

Dormitories house children who attend local public schools. These are children who do not have public schools available in their home communities. They are enrolled at both the elementary and secondary levels. The dormitories provide housing, feeding, and out-of-school recreation and tutoring activities.

The majority of those enrolled in day schools are in the elementary grades with only around five percent in high school. Most of these schools are small schools in isolated locations. Programs are designed to compensate for the effects of isolation and economic and social deprivation experienced in such locations. Kindergarten classes are provided for five-year-old children.

Highlights of Recent Accomplishments:

Funds were appropriated in FY-1974 for two pilot Parent-Child Development Programs (Pre-Kindergarten Pilot Program). Because of the trend toward Indian operation of Bureau programs, it was decided that proposals for contract solicited from all Tribes meeting basic program criteria for planning and implementation. Criteria require that programs coordinate but not duplicate existing resources.

On the basis of proposals submitted two tribes were selected for planning contracts: the Pueblo de Acoma and the Mississippi Band of Choctaw Indians. Planning has now been completed by both tribal groups and a contract for operation was signed with the Choctaw Indians on December 13, 1973. The contract for operation is in negotiation with Acoma.

At Choctaw the Parent-Child Development Program Choctaw Board of Directors is actively involved in decision making for operation of the program. One hundred children, pre-natal - 4 years, have been identified; staff has been employed; equipment has been ordered; preservice training is in process; and facilities are in process of renovation for day care services.

It is anticipated that operation of both Acoma and Choctaw day care centers and family day care programs will be in operation by February.

Within the past two years the reading programs at Phoenix Indian High School and Stewart Indian School, two schools in the Phoenix Area, received national recognition as two of the best reading programs in the United States.

An air bookmobile service has been established in the Bethel (Alaska) Agency. This service reaches over 30 Native village schools, supplying each with library books, film strips, records, tapes and other educational materials. Many deliveries are made within 24 hours by "bush" aircraft.

One of the most extensive and comprehensive research programs on Native education is in process in Alaska. The Alaska Native needs assessment program is being accomplished through the cooperative efforts of the State of Alaska, Native groups, students and the Bureau of Indian Affairs.

Two programs of self-evaluation and improvement of instruction have been incorporated as a part of the Muskogee Area program of educational accountability. The first, Instrument for the Observation of Teaching Activities, was officially implemented in September, 1973. Preliminary plans call for the official implementation of the second, Performance Evaluation for the Educational Leader, following an Area wide workshop in March of 1974.

NALAP (an acronymn for Navajo Area Language Arts Project), a project to develop relevant second language learning materials for Navajo children, is in progress on the Navajo Reservation. NALAP materials have been field tested in twenty-two schools during the past two years. NALAP is a structual-sequential English language program which presents the grammatical structures of English in a sequence believed to be suitalbe for Navajo children learning English as their second language. The materials, through the use of numerous examples and meaningful activities, help children to internalize the structures of English by capitalizing on the thought process involved in language learning rather than on rote drill and model-mimicry. NALAP, Book I, containing ten units of 86 structural objectives has been revised and refined and will be used in over 50 per cent of Navajo Area schools during the 1973-74 school year. Additional units are also being developed.

In the area of research, a pilot project is in existence to determine sucess of pupils who learn to read initially in Navajo rather than English. This bilingual-bicultural program is in operation at Sanostee, Toadlena, Cottonwood, Greasewood and Pinon. Navajo is the language of instruction in this program. At the kindergarten and first grade levels, most of the instruction is in Navajo with time set aside for teaching English. At the first grade level, initial reading and writing is in Navajo. In the second and third grades, more English is used, and instruction is used in both languages.

B. Assistance to Public Schools: FY-1974, $25,352,000; FY-1975, $27,952,000; increase $2,600,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) +2,055,000	-	27,952,000	-	To provide for increased enrollments in Johnson O'Malley assisted public schools.
(2) + 545,000	-	-	-	To partially offset cost of living increases.
+2,600,000	-			

Cost Factors Involved in Increases

(1) Anticipated enrollment increase of 7,500 students at an average cost of $274, per student.

Need for Increase:

(1) An increase of $2,055,000 is requested to provide for an unanticipated enrollment increase of 5,500 students in fiscal year 1974 and for an additional increase of 2,000 students expected in fiscal year 1975. This increase will permit the various public schools to return to fiscal year 1973 levels of support per pupil.

(2) The increase of $545,000 will be required to partially offset cost of living increases and to provide for greater tribal and parental involvement to the extent possible.

Program of Work:

Under the Act of April 16, 1934, as amended, commonly called the Johnson-O'Malley Act, the Bureau of Indian Affairs, provides supplementary aid to public school districts which face financial problems due to the presence of tax-exempt, Indian-owned lands within the district boundaries and the enrollment of relatively large numbers of Indian children.

Many of the school districts on Indian reservations have insufficient funds to operate effective school programs even with State aid and general Federal aid to education programs. Such districts have little or no tax base. In these districts, Johnson-O'Malley aids are used to assume operation of a basic school program.

As States and local school districts assume increased responsibility for basic education programs, Johnson-O'Malley funds are made available for special education purposes that identify with Indian children. Such programs will have a positive effect in improving education achievement, reducing dropouts, and pave the way for entrance into improved employment opportunities of higher education programs. Some of these supplemental programs are: Transportation for kindergarten children; Employment of home-school coordinators and guidance counselors; Arts and Crafts programs; Teacher aides and inservice training programs; Workshops for teachers of Indian children; Cultural enrichment programs; Summer programs; Parental costs; Curriculum development; Student conferences; Special transportation and Special library services.

The funds are made available through contracts with the State departments of education and tribal groups operating on the basis of plans developed cooperatively by the Bureau of Indian Affairs and the contracting agency. The plans take into consideration the ratio of Indian children involved, local tax efforts, all other sources of aid available, including other Federal programs of aid to education (Public Laws 81-815, 81-874, and 89-10), and any special situations or needs related solely to Indian children.

Aid is also provided to cover the full per pupil costs of education of Navajo children housed in Federal dormitories who attend out-of-district public schools peripheral to the reservation. A contract is negotiated with each such district for a specified number of Indian students. In addition to the full cost of education, funds are provided for parental items such as lunches, school supplies, etc.

In the State of Alaska, Johnson-O'Malley funds are also used to provide subsistence for students housed in dormitories at Nome, Kodiak, and Bethel, and for students placed in urban boarding homes where high schools are available.

Highlights of Recent Accomplishments:

The greatest accomplishment in the Johnson-O'Malley programs in recent years has been the greatly increased involvement of local Indian education

committees in the planning and monitoring of projects. All schools or school districts receiving Johnson-O'Malley assistance now have these Indian education committees and the approval of these committees is asked for all projects.

During the past year emphasis was placed on local Indian participation in programming the use of Johnson-O'Malley funds for education of Indians in public schools. In each school district an Indian advisory school board was chosen and in ten states Johnson-O'Malley funds were administered to eligible school districts through contracts with Indian corporations. It is likely that similar contracts will also be in effect next year in Oklahoma and Arizona.

Indian parents are establishing control over public school programs affecting their children. Evaluation reports show that Indian parents and students are more responsive to Johnson-O'Malley financed programs than in previous years.

During 1973 there was also an increase in the percentage of total Johnson-O'Malley funds spent for special need programs and a corresponding decrease in basic support funding.

The total number of Indian students served under this program again increased to a total of more than 98,000 in fiscal year 1974.

Administration of the Johnson-O'Malley program in the state of Idaho has been expanded to provide for more Indian involvement. Three people of Indian ancestry will administer the program; one located in Northern Idaho, and in Boise, and one in Southern Idaho.

Due to recent acquisition of land by the Burns Paiute Tribe in Oregon, the Harney County School District became eligible for Johnson-O'Malley funding and this year the Bureau negotiated a contract with the School District.

C. Career Development: FY-1974, $43,800,000; FY-1975, $51,861,000; increase $8,061,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	+7,200,000	-	29,956,000	-	To meet increased cost of college scholarships.
(2)	+ 527,000	- 1	2,620,000	56	Increase in adult education services.
(3)	+ 334,000	- 51	19,285,000	281	Increase in adult vocational training services.
	+8,061,000	- 52			

Cost Factors Involved in Increases

(1) College scholarship grants to 1,200 additional students at $1,754 per student. Cost of living increases for 13,500 students at $377 each per year.

(2) The increase in funds for this activity will allow the establishing of 15 or more learning centers and Adult Education programs at locations that presently have no programs with the additional used to fund deficiencies in

established operating programs.

(3) Adult vocational training services to an additional 72 trainees.

Need for Increase:

This subactivity provides for a single, coordinated career development program. It will use a coordinated approach to solving the problems individual Indians face in career selection. A Career Counselor will be available locally who can provide funding for those activities deemed appropriate to assist the career development of the individual counseled. The funds would be used for any of a full range of activities under the Career Development Program such as, higher education, institutional vocational training, or adult education, separately or in combination. This funding approach would insure that these programs would complement each other in meeting the needs of the individuals served. The Career Counselor would be the single contact necessary for a client to enter a career development program. The counselor would also be well suited to act as a clearing agent for any funding assistance from non-BIA Federal, state, tribal, or private sources which might be available. Need for increase is detailed below.

(1) College assistance grants for Indian students to attend college is an important part of the career development program concept. It is estimated that it will be $29,956,000 within the total program in FY-1975.

Of the $29,956,000 requested $25,784,000 will be available for regular student scholarships. The remainder will be used for administration and special programs as shown in the following chart:

Special Scholarship Projects

	FY-1974	FY-1975
American Indian Law Program.....	$ 678,850	$ 678,850
Indian School Administrator's Program.....	265,000	265,000
Navajo Community College.....	2,058,000	2,058,000
Sinte Gleska College.....	200,000	200,000
Lakota Education Center.....	200,000	200,000
Tribal Contracts (Admin. Costs Only)	350,000	350,000
American Indian Scholarships, Inc. (Graduate Program).....	100,000	-
Area Office Projects.....	380,000	400,000
Central Office Projects.....	20,150	20,150
Total	$4,252,000	$4,172,000

In the interest of funding as many students as possible, the practice of funding married students with single student grant amounts will continue during FY-1975. The following table on college costs illustrates this increase. The average for single students attending public-supported institutions in FY-1975 is expected to be $2,900:

COLLEGE COSTS 1/

Single Students:	FY-1974	FY-1975
Private.....	$ 3,496	$ 3,846
Public.....	2,635	2,900

COLLEGE COSTS (Cont.)

Married Students:	FY-1974	FY-1975
Private	$ 5,455	$ 6,000
Public	4,550	5,000

1/ Estimates based on Area college cost averages plus U. S. Office of Education base statistics.

The Bureau's $25,784,000 combined with the amount available from other resources will make a total budget of approximately $42,630,000 for students who will be applying for assistance from the Bureau in FY-1975.

SOURCE OF SCHOLARSHIP FUNDING

	Total Amount	Students Funded	Average Grant
Bureau of Indian Affairs	$25,784,000	14,700	$1,754
Other	16,846,000	-	1,146
Total	42,630,000	14,700	2,900

Funds from Other Sources:	
Other Federal Program (EEOG, Work-Study, Loans, & College Scholarships	$ 5,698,000
Tribal Scholarships & Loans	600,000
State, Private, Foundation Scholarships	3,000,000
Student and Family Contributions	7,548,000
Total	16,846,000

(2) Another important part of the career development program concept enables adult Indians, through part-time education near their homes, to improve their opportunities for employment or expand their education. An increase of $527,000 will extend programs to Indians not now receiving services. Major emphasis is placed on expressed local needs which is generally preparation for high school equivalency examinations and basic literacy. Courses are also offered in a variety of other subjects including consumer economics, nutrition, safety, civics and Indian language and culture.

The Contracting of these programs to tribal groups in continuing. Ten additional programs have been contracted to the tribes this year, in whole or in part, bringing the total to 26. Others may be contracted during the current fiscal year.

(3) The increase of $334,000 will provide appropriate career development training to assist Indian people to qualify for and hold jobs on or near Indian reservations. The increase will provide institutional training services to about 135 additional students over the total assisted in FY-1974.

Program of Work:

Grants are made to Indian students who cannot qualify for other types of scholarship aid or who require additional funds that cannot be obtained from other sources, and who would otherwise be unable to attend college.

Financial need is determined through the financial aids office of the college the student plans to attend or is attending. Although the demand for financial assistance from needy students other than Indians often depletes college resources, Bureau scholarship representatives will continue to support, where feasible, the "package" plan utilizing other financial assistance programs combined with Bureau funds to adequately finance Indian college students.

The importance of adequate vocational counseling for post-secondary education is readily apparent. Contacts with high schools enrolling Indians will continue to be an integral function of the Area scholarship representatives as will expanded on-campus visitation. Indian input into the operation of the program includes contracts for scholarship services with recognized tribal organizations and contracts with on-and off-campus Indian organizations.

The Navajo Community College Act passed in 1971 authorized the Secretary of the Interior to assist the tribe in the construction, maintenance, and operation of the school. The annual sum for operation and maintenance of the college is not to exceed the average amount of the per capita contributions made by the federal government to the education of Indian students at federally-operated institutions of the same type.

Adult education services enable adult Indians through part-time education near their homes to improve their opportunities for employment or further education. Major emphasis is placed on preparation for high school equivalency examinations and basic literacy. Courses are also offered in a variety of other subjects including consumer economics, nutrition, safety, civics and Indian language and culture.

Adult vocational training services provide training and support services including, but not limited to, career and community counseling, tuition and monthly subsistence.

Highlights of Recent Accomplishments:

In the past year about 11,000 Indian adults participated in BIA funded adult education activities, 1,200 obtained their high school equivalencies (GED's), some 325 unemployed were hired, 150 currently employed were promoted, 200 entered college, and 200 entered other full-time education programs.

Fourteen adult education learning centers operating on a full-time drop-in basis, with individual instructions, are now in operation with four more planned to become operational this fiscal year by joint use of BIA-USOE funds.

During FY-1973, 7,609 individuals were assisted directly through adult vocational training services to enter formal vocational training activities throughout the United States. Of the total number, 2,512 completed training and entered the tribal manpower resources of Indian tribal groups or chose to pursue working careers in urban areas. Two thousand nine hundred twenty-eight carried over into training during FY-1974

The Indian Lawyer, Educational Administration, and College Work-Study projects provided special scholarship grant assistance to 344 Indian students in FY-1973. These projects provide training at the under-graduate and graduate levels in critical area professions.

The total number of students assisted through scholarship grants increased from 12,438 in FY-1972 to 13,387 in FY-1973.

2. Indian Services

Subactivity	FY-1973 Amount Available	FY-1974 Amount Available	FY-1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
A. Aid to Tribal Government	$ 7,334,000	$ 6,563,000	$ 8,438,000	$+ 1,875,000
B. Social Services	9,996,635	9,437,000	11,194,000	+ 1,757,000
C. Law Enforcement	7,983,000	10,353,000	6,681,000	- 3,672,000
D. Housing	4,343,000	4,374,000	4,190,000	- 184,000
E. Direct Indian Services Operations	51,837,000	63,191,000	65,801,000	+ 2,610,000
Total	81,493,635	93,918,000	96,304,000	+ 2,386,000

	Bureau Assistance Programs		Contracts and Grants to Indians		Total Program		
	FY-1974	FY-1975	FY-1974	FY-1975	FY-1974	FY-1975	
A. Aid to Tribal Government	6,563,000	8,438,000	2,187,000	2,445,000	8,750,000	10,883,000	+ 2,133,000
B. Social Services	9,437,000	11,194,000	50,790,000	52,476,000	60,227,000	63,670,000	+ 3,443,000
C. Law Enforcement	10,353,000	6,681,000	1,682,000	2,162,000	12,035,000	8,843,000	- 3,192,000
D. Housing	4,374,000	4,190,000	8,532,000	8,718,000	12,906,000	12,908,000	+ 2,000
Total	30,727,000	30,503,000	63,191,000	65,801,000	93,918,000	96,304,000	+ 2,386,000

A. Aid to Tribal Governments: FY-1974, $8,750,000; FY-1975, $10,883,000; increase $2,133,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)+ 146,000	-	2,474,000	10	To meet increased expenses in the on-going Agricultural Extension program.
(2)+ 116,000	-2	1,161,000	14	Increase tribal Comprehensive Planning capability.
(3)+1,871,000	-2	7,248,000	118	Expand TGDP, meet costs of new judgment fund legislation, improve tribal participation in budget process, continue Youth Work-Learn program and built-in cost increases in tribal operations.
+2,133,000	-4			

Cost Factors Involved in Increase

(1) Increase in costs averaging 6% for existing state and tribal contracts in Agricultural Extension - $146,000.

(2) Expand tribal Comprehensive Planning by 11% or $116,000.

(3) Provide for increased average costs and additional contracts under TGDP ($1,128,000); cost of new judgment legislation ($320,000); improve tribal participation in the budget process ($169,000); meet built-in cost increases in tribal operations (254,000).

Need for Increase:

(1) Agricultural Extension - Existing contracts with state universities and tribes in 18 states are all experiencing increased costs. A 6% increase of $146,000 is required to permit operations to continue at the current level.

(2) Comprehensive Planning - The $116,000 or 11% increase will permit this vital program to extend needed planning assistance to additional tribes.

(3) Tribal Operations - The following increases are required:

	(In thousands of dollars) FY-1974	FY-1975	Change
(a) Regular program built-in increase.....	$3,145	$3,399	$+ 254
(b) Judgment fund legislation....	-	320	+ 320
(c) TGDP:	2,232	3,529	+1,297
1 Contract program.....	(1,632)	(2,760)	(+1,128)
2 Tribal participation in budget process.....	(100)	(269)	(+ 169)
3 Youth Work-Learn program	(500)	(500)	(-)
Total....	5,377	7,248	+1,871

Without the increase in TGDP it is estimated that from 60 to 100 tribal applications meeting all eligibility criteria of need would not be approved due to lack of funds.

The new judgment fund legislation, Act of October 19, 1973 (P.L. 93-134, 87 Stat 466) requires the Bureau to conduct public hearings of record in determining judgment use plans which are then to be submitted to the Congressional committees for approval. Estimated cost increase for this new program is $320,000.

Tribes have participated in the formulation of all BIA budgets since FY-1973. The proposed increase of $169,000 will meet rising costs in this phase of the program as well as providing funds for meetings of tribal officials regarding budget execution.

The regular tribal operations program consisting of constitutional and charter actions, judgment fund research, roll preparation and updating and technical advice to tribes on governmental matters will require an additional $254,000 to operate at the same level in FY-1975.

Program of Work:

The Agricultural Extension program will provide technical advice and assistance to reservation Indian families, individuals and associations. Emphasis is placed on improvements in use of agricultural resources, homemaking and family economics. Services will be provided by home demonstration agents, county agents and youth activities such as 4H. The program will be carried out with a minimum of Bureau staff by using contracts with state universities and tribal councils.

The Comprehensive Planning program will provide Indian tribes with the resources required for them to develop and maintain comprehensive plans. As such this program will play a key role in the continued implementation of the Indian self-determination policy.

Under the new judgment fund legislation (Act of October 19, 1973, P.L. 93-134, 87 Stat. 466) the Bureau expects to conduct 50 hearings of record which will lead to judgment use plans submitted to Congressional committees for approval. Each plan will be submitted within six months after the appropriation act for the award.

During FY-1975 somewhere between 135 and 185 tribes will contract with the Bureau to provide Tribal Government Development Program services. This will represent a doubling of the FY-1974 effort. As a result the quality of tribal governmental administrative systems will be improved. Projects to be accomplished include: Development of election ordinances; Administrative plans; Tribal membership rolls'; Development of governing documents and amendments thereto; Land assignment ordinances; and Plans for management of tribe's resources.

Tribal participation in the Bureau's budget formulation process has insured that tribal priorities are reflected in the budget. During FY-1975 the proposed program will provide funds for involving the tribes in the execution phase of the budget thereby providing the Bureau with tribal advice on how to carry out projects and programs which have been funded under tribal budget priorities.

The Youth Work-Learn program will be continued in FY-1975 as a clean-up program in and around Indian villages. In addition to the end product of cleaner villages the program has the purpose of providing young people with work opportunity and management experience in community projects.

Under the Tribal Operations program the Bureau will continue to provide technical assistance and advice to tribal governments to improve the quality of governmental services to Indians.

Upon request, the Bureau will explain and interpret various governmental services and procedures to tribal governments and present alternatives. The tribes will make their own choices for the management of their own affairs. The usual vehicle for a major change in a tribal government or its operations is a new or revised constitution or charter. The Bureau is currently working with tribes on approximately 110 tribal constitution or charter actions. In FY-1975, 53 such actions should be completed.

Also during FY-1975, the Bureau will work on 145 payment or judgment rolls. The Bureau plans to start 52 new judgment payment rolls, complete 19 other payment rolls, and prepare 74 tribal membership roll supplements. Enrollment appeals from judgment rolls prepared in prior years will continue to be processed and will increase the workload. Completion of judgment rolls in FY-1974 will contribute to the appeals workload in FY-1975.

The Bureau will continue to process attorney contracts for claims and other services, review attorney expense vouchers, organize meeting to review compromise claim settlements, and review tribal requests for loans to hire expert witnesses for claims litigation.

In FY-1975, it is estimated that 28 dockets with awards totaling approximately $56 million will be made by the Indian Claims Commission in settlement of claims against the United States. These awards, plus those of previous years, constitute the basis for the judgment work program. The Bureau conducts research to determine the modern-day beneficiary for each award and assists the Indian tribes in developing proposals for the use or distribution of these judgment funds.

Highlights of Recent Accomplishments:

Agricultural Extension - Home demonstration and home gardening visits were made to 14,000 families and approximately 24,000 youths participated in 4H activities.

Under TGDP in FY-1973, the Bureau contracted with 74 tribal entities for over $1.3 million in tribal administrative and operating procedures projects. Over 80,000 Indian people benefited from these projects.

During FY-1973, Tribal Operations accomplished the following: Conducted beneficiary research for eight judgments and prepared draft legislation for four more awards; Completed action on 104 tribal membership and/or payment rolls; Completed action on 43 tribal constitution and charter actions.

B. Social Services: FY-1974, $60,227,000; FY-1975, $63,670,000; increase $3,443,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)+2,157,000	-	49,095,000	-	Increase in General Assistance Unit Costs and increase in number of TWEP participants.
(2)+1,080,000	-	6,480,000	-	Increase in Child Welfare Unit Costs

Increase (+) or Decrease (-) Amount	(Cont) Positions	Total Program	Total Positions	Explanation
(3)+ 125,000	-	400,000	-	Increase in cost for miscellaneous assistance.
(4)+ 81,000	-28	7,695,000	440	Increased administrative expenses.
+3,443,000	-28			

Cost Factors Involved in Increase

(1) General Assistance -Increased unit costs for 75,000 at $2.25 per month per person, an increase of $2,025,000. Tribal Work Experience Program (TWEP) costs for 275 additional employable assistance recipients at $40 per month per worker, $132,000; a total increase for General Assistance of $2,157,000.

(2) Child Welfare - Increased unit costs for 3,600 children at $25 per month per child.

(3) Miscellaneous Assistance - Burial services for 250 persons at increased unit cost of $100 each, $25,000. Increased costs relative to assisting tribes to participate in the food distribution program.

(4) Social Services - Increased expense associated with the administration of the General Assistance and Child Welfare Assistance Programs, $81,000.

Need for Increase:

The Federal Government has assumed responsibility for providing financial assistance and other social services to Indian residents of reservation communities who are in need but who do not receive State or county assistance. The 1975 projections for assistance and social services are based upon caseload history, probable eligibility, and recognized trends.

Welfare Assistance and Social Services

	FY-1973	FY-1974	FY-1975	Change
General Assistance,.	$42,060,000	$46,938,000	$49,095,000	$ +2,157,000
(Caseload).....	(69,000)	(75,000)	(75,000)	(-)
Other Welfare Assistance:				
Child Welfare.....	5,400,000	5,400,000	6,480,000	+1,080,000
(Caseload).....	(3,600)	(3,600)	(3,600)	(-)
Miscellaneous Assistance	275,000	275,000	400,000	+ 125,000
Social Services.....	7,327,000	7,614,000	7,695,000	+ 81,000
(Staff)	(468)	(468)	(437)	(-31)
Total Cost...	55,062,000	60,227,000	63,670,000	+3,443,000

The Social Services staff provides a generic social services program which includes General Assistance, Child Welfare Assistance and individual and family counseling and related casework services.

The increased workload handled by the Social Services Staff is reflected by the significant increase in the average monthly General Assistance caseload during recent years; 1971, 57,665 persons; 1972, 61,915 persons; 1973, 69,000 persons (estimated), and 1974, 75,000 persons (estimated). Therefore, $81,000 is required to provide for cost increases associated with administration of the General Assistance and Child Welfare programs. These cost increases are directly related to travel and office expenses of the Social Services staff of 440.

Program of Work:

Applications and continuing eligibility for assistance will be appropriately investigated. The needs of neglected and handicapped Indian children will be investigated, and when placement away from home is indicated, foster care and appropriate institutional care will be provided for dependent, neglected, and handicapped Indian children from reservations for whom such care is not available through established welfare agencies. Appropriate counseling will be provided to tribal courts in connection with problems of children and provision of protective services, and staff services will be provided to assist in housing programs and programs for family use of judgment funds.

Miscellaneous assistance will provide burials for Indians in need and will also provide for other costs related to welfare programs, including arrangements with tribes in need for meeting some of the costs of the food distribution program for eligible Indian families.

The successful Tribal Work Experience Program (TWEP) will be continued and expanded as one way of providing the assistance needs of employable Indians. Constructive employment through TWEP has been provided for many Indian people, and in many instances, training opportunities have also been provided. TWEP projects such as home construction and repair, building maintenance, and development of recreational facilities have contributed directly to the welfare of the reservation community. TWEP has also provided management experience for participating tribes.

Highlights of Recent Accomplishments:

In FY-1974 General Assistance was provided to 75,000 persons and Child Welfare benefitted 3,600 children. The chart below illustrates actual and projected TWEP participation for the indicated fiscal years:

TWEP Participation

	FY-1973	FY-1974	FY-1975
Number of Tribes (average).....	29	30	31
Number of Participants.....	4,000	4,250	4,525

C. Law Enforcement: FY-1974, $12,035,000; FY-1975, $8,843,000; decrease $3,192,000. The increase and decrease consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) - 3,528,000	-	-	-	Reduction of FY-1974 funding used to reimburse other Federal Agencies for expenses associated with Wounded Knee disturbance.
(2) + 328,000	- 22	8,519,000	292	Meet increased costs in on-going programs.
(3) + 8	-	324,000	13	Continuation of the program at Navajo.
- 3,192,000	- 22			

Cost Factors Involved

In FY-1974 Congress added $3,528,000 to the Bureau budget to reimburse other Federal Agencies for expenses associated with the disturbance at Wounded Knee. This one-time expenditure has been deducted ($ -3,528,000) from the Bureau's FY-1975 budget.

Program of Work:

The Bureau is responsible for providing Law Enforcement Services to over 300,000 Indian people on 87 reservations in 17 states at a cost of $8.8 million as follows:

FY-1975

Law Enforcement Program	(In thousands of dollars) Funding	Staffing
Program Supervision & Investigation.....	$2,900	100
Enforcement.....	4,000	176
Prevention & Rehabilitation.....	600	4
Detention.....	400	5
Judicial.....	300	-
Other.....	600	20
Total.....	8,800	305

The Bureau expends approximately $2.9 million and has a staff of 100 which provides program direction, supervision, and investigation. Approximately $4.0 million and a staff of 176 provides reservations with enforcement services. Enforcement Services mainly consist of patroling Indian communities. It is estimated that the above segments of the program in the FY-1975 will investigate in excess of 122,000 complaints which is an increase of 3,000 over FY-1974 and 8,000 over the fiscal year just completed. The Bureau expends approximately $ .4

million to operate 23 detention facilities of which approximately $ .2 million is contract funds. In addition to the above segments the Bureau will continue to provide prevention and rehabilitation services at an estimated cost of $ .6 million of which approximately $ .3 million is for operating the Prisoner/ Release Program and judicial services at an estimated cost of $ .3 million. An additional $ .6 million is required to meet support costs.

Highlights of Recent Accomplishments:

A Special Operations Services unit was established using personnel from the Bureau's Law Enforcement program. Special training and equipment necessary for civil disturbance control were provided and the unit was activated twice during FY-1974. Its presence played a part in preventing possible disturbances at Gallup, New Mexico and Pine Ridge, South Dakota.

The Prisoner Parole Program continues to be a success. The figures for FY-1973 indicate that during the year 599 inmates were released with 149 violating parole. This is a recidivism rate of 25% as compared with a national average of 75%.

D. Housing: FY-1974, $12,906,000; FY-1975, $12,908,00, increase $2,000. The increase and decrease consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) + 12,000	-	10,402,000	19	Help meet increased costs in HIP renovation and replacement.
(2) - 10,000	-	2,506,000	96	Continue the Housing Development program of assistance to Indian Housing Authorities.
+ 2,000	-			

The HIP request of $10,402,000 will provide 4,400 renovations at an average cost of $1,655 ($7,282,000), and 500 new homes at an average cost of $6,240 ($3,120,000).

The estimate of housing need has been determined from the 1973 Housing Survey which shows:

Service population (families).....	106,900
Less: Existing dwellings - standard condition.. 36,000	
Existing dwellings - adequate condition..* 4,600	
Subtotal.....	-40,600
Families in need of housing assistance.....	66,300
Less: Houses to be renovated to standard.....	-19,200
New homes required.....	47,100

* Adequate condition exists when a house is in standard condition except that one or more utilities is not available.

Program of Work:

As indicated above there are 66,300 families in need of housing assistance. During FY-1975 it is estimated that the proposed budget of $12,908,000 will provide assistance to 10,900 families as follows:

New Homes	
HIP	500
HUD commitments	6,000
Renovations	
HIP	4,400
Total	10,900

The total HUD program commitment for Indian housing amounts to 30,000 homes. As of June 30, 1973, some 15,000 houses had been delivered with 15,000 remaining to be constructed. The Bureau through its traditional Housing Development efforts will continue to provide technical and administrative assistance to tribes in developing housing project applications and proposals for financial assistance under Federal housing programs.

However, the Housing Development assistance provided the Indian people is changing to meet changing program needs. Three factors caused this change:

As the housing program progresses, it begins to reach areas and people more difficult to serve adequately without more intensive and direct assistance from knowledgeable Bureau housing technicians.

As the Department of HUD continues to reorder its priorities and change its administrative structure, Indian housing authorities and others involved in HUD activities are increasing their reliance on Bureau technical staff.

As the responsibilities of Indian housing authorities increase in scope and complexity, the technical advice, training and financial assistance required from the Bureau also increases.

As a consequence the Bureau program will have a heavy emphasis on training. This training will be available to both homeowners and housing authorities and will acquaint homeowners with home repair skills and home management techniques and also equip housing authorities' personnel with a better understanding of problems and anticipated needs of housing occupants as these needs relate to successful housing management.

Specialized training for housing authority personnel will provide authority personnel with up-to-date knowledge of HUD programs and requirements for participation therein and will enable the authorities to meet their responsibilities under greatly increased administrative and managerial workload resulting from the continued increase in units under occupancy.

In order to expand and improve upon the delivery of houses in remote areas and/or to people whose incomes are below standard levels for economic feasibility, the Bureau has been working with the Department of HUD and the Indian Health Service. These negotiations have produced agreements which should provide an excellent test for expanding delivery of decent shelter to such places as Alaskan remote villages. This cooperative effort will make housing

available on a large scale to people hitherto not included in nor qualifying for project-type housing programs.

Highlights of Recent Accomplishments:

	FY-1973	Estimated FY-1974
HIP renovations	4,460	4,400
HIP New	514	500
HUD New	3,162	6,000
Indian Housing Authorities' Units under Occupancy	16,000	20,000

3. Tribal Resources Development

Subactivity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
(a) Business Enterprise.....	$5,167,495	$5,137,000	$5,980,000	$+843,000
(b) Credit.....	2,104,203	2,316,000	2,677,000	+361,000
(c) Direct Employment.....	6,900,588	3,330,000	3,537,000	+207,000
(d) Roads Maintenance.....	5,925,814	6,361,000	7,117,000	+756,000
(e) Forestry and Agriculture.	19,037,357	19,788,000	19,772,000	-16,000
(f) Minerals, Mining, Irrigation and Power....	1,544,420	1,612,000	3,142,000	+1,530,000
(g) Direct Tribal Resources Development Operations..	10,507,621	12,781,000	15,384,000	+2,603,000
Total.....	51,187,498	51,325,000	57,609,000	+6,284,000

Subactivity	Bureau Assistance Program		Contracts and Grants to Indians		Total Program		Increase (+) or Decrease (-) 1975 Compared with 1974
	F. Y. 1974	F. Y. 1975	F. Y. 1974	F. Y. 1975	F. Y. 1974	F. Y. 1975	
(a) Business Enterprise.....	$5,137,000	$5,980,000	$386,000	$543,000	$5,523,000	$6,523,000	$+1,000,000
(b) Credit.....	2,316,000	2,677,000	25,000	220,000	2,341,000	2,897,000	+556,000
(c) Direct Employment.....	3,330,000	3,537,000	11,411,000	11,898,000	14,741,000	15,435,000	+694,000
(d) Roads Maintenance.....	6,361,000	7,117,000	230,000	636,000	6,591,000	7,753,000	+1,162,000
(e) Forestry and Agriculture.	19,788,000	19,772,000	729,000	2,080,000	20,517,000	21,852,000	+1,335,000
(f) Minerals, Mining, Irrigation and Power....	1,612,000	3,142,000	-	7,000	1,612,000	3,149,000	+1,537,000
Total.....	38,544,000	42,225,000	12,781,000	15,384,000	51,325,000	57,609,000	+6,284,000

a. Business Enterprise: F.Y. 1974, $5,523,000; F.Y. 1975, $6,523,000; increase, $1,000,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+500,000	-8	$3,823,000	95	For professional business management counseling and technical assistance to tribal business enterprises.
(2)	+200,000	-	2,400,000	-	To finance additional OJT contracts with Indian community employers.
(3)	+300,000	-	300,000	-	Bi-Centennial Program.
	+1,000,000	-8			

Cost Factors Involved in Increases

(1) Thirty-three professional evaluations estimated at approximately $10,000 each, $330,000; support services to the American Indian Travel Commission, $100,000; updating and printing of technical publications and promotional material involving Indian commercial and industrial development, $56,000; $14,000 to annualize October 1973 Federal civilian pay raise; total, $500,000.

(2) $200,000 for 200 additional Indian trainees through on-the-job training contracts at an average cost of $1,000 per trainee.

(3) $150,000 for development and expansion of Indian Services, and $150,000 for the development of facilities in connection with the U. S. Bi-Centennial Program; total, $300,000.

Need for Increase:

With the unemployment among the Indians residing on reservations hovering around 40% and the per capita annual income of approximately $1,200, the development of jobs and other income opportunities, and the training of Indians to fill those jobs ranks high among needs. Hence, business enterprise development in Indian communities is an essential program ingredient. The requested funding increases will allow improvement of these conditions to an appreciable extent. The monies for the Bi-Centennial Program are needed to assure full participation of Indians in the national Bi-Centennial celebrations.

Program of Work:

In Fiscal Year 1975 the efforts in Indian business enterprise development will continue to focus on activities designed to (1) meet the persistent employment and income needs of reservation Indians; (2) increase the Indian tribal ownership of economic resources, and (3) accelerate the effort to assist the Indians in development and/or expansion of trade and commerce in Indian home communities. These objectives will be encouraged and assisted through a variety of technical and financial programs that include development of new and/or expansion of existing Indian owned and operated commercial and industrial establishments, on-the-job training assistance, promotion and development of Indian arts and crafts projects and Indian outdoor recreation resources.

The major program thrusts in the area of commercial and industrial development will include (1) continued emphasis on technical assistance to Tribal and privately owned businesses to improve and expand their enterprises; (2) continued emphasis on inducing manufacturers and businessmen to locate on or near reservation areas; (3) assisting the Indian Tribes in development of processing facilities of agricultural, mineral, and other products from Indian owned resources; (4) assisting Indian Tribes in finding various sources of financing to fund business ventures; (5) developing and disseminating information, publicizing Indian commercial and industrial resource potentials; (6) providing economic research and technical assistance that will include market analyses, economic feasibility determinations, short and long-range business development plans, and reservation resource inventories of natural, human and capital assets.

In pursuing the policy of the Bureau to develop and maintain cultural, recreational, fish, wildlife and other outdoor recreational practices, the program in Fiscal Year 1975 will be to essentially maintain the limited planning base established in Fiscal Year 1973. This will involve conducting surveys of Indian reservations' outdoor recreation resource potentials, develop comprehensive plans, determine feasibility of all elements related to outdoor recreation, explore various sources of funding assistance, and coordinate with other Federal and State agencies resources not available in the Bureau of Indian Affairs.

Also, included in this area of endeavor will be special funding to reimburse the Bureau of Sport Fisheries and Wildlife, which will continue to provide technical fisheries assistance to Indians in connection with the off-reservation treaty fishing rights. This service will cover 25 Indian Tribes in the States of Washington, Oregon, and Idaho.

In the development of the Indian manpower resources the program of work will continue to concentrate on designing and instituting the kinds of training activities that will prepare Indian people as owners, managers and employees of successful businesses. This concept will include direct contracts with industries for on-the-job training of Indian employees. It is estimated that in Fiscal Year 1975 the program will provide employment training opportunities for a total of 2,700 on-the-job training participants through some 80 on-the-job training contracts with industries located on Indian reservations.

In the area of Indian arts and crafts the program of work in Fiscal Year 1975 follows the pattern as specified by Public Law 74-355. Accordingly, the Indian Arts and Crafts Board, organized to promote the development of Native American arts and crafts, will provide professional services to Indian, Eskimo and Aleut artists and craftsmen, with anciliary benefits to the general public, which include experimentation, correlation of public and private programs, technical advice, and trademark and related protective legislation. These national advisory, promotional, and informational services are implemented primarily through three arts and crafts specialists and a coordinated system of three regional museums administered and operated by the Board. These are, the Southern Plains Museum and Crafts Center in Anadarko, Oklahoma; the Sioux Indian Museum and Crafts Center in Rapid City, South Dakota; and the Museum of the Plains Indian and Crafts Center in Browning, Montana.

Finally, to insure full participation of Indians in the celebration of the national Bi-Centennial activities the Fiscal Year 1975 program of work is designed to promote projects stressing the theme of "Discover America With the First Americans." Emphasis will be placed on expanding and establishing additional Indian services in the Southwest (including Northern and Southern Pueblos, Navajo, Hopi, White Mountain Apache, Mescalero Apache, and Colorado River); in the Northern Plains area (including Montana and Wyoming reservations);

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and in the Sioux Indian country (North and South Dakota reservations). Additional Indian Bi-Centennial projects will also be provided financial and technical assistance in other parts of the country based on potential contribution to overall Bi-Centennial objectives.

Highlights of Recent Accomplishments:

On November 15, 1973, the American Indian National Bank opened its doors for business. This is the first such financial institution wholly owned and operated by and for the American Indians. The successful formation of this project was made possible with the technical assistance and financial aid provided by the Bureau of Indian Affairs and cooperative funding from EDA, OEO and OMBE, within the context of a program thrust designed to assist Indian groups in their efforts to establish Indian owned and managed financial institutions. The new Bank is the keystone of an envisioned national Indian structure that will eventually provide a multitude of services including full banking operations, capital for business ventures and insurance services to Indians throughout the United States.

The Bureau has provided technical assistance and financial aid in cooperation with the National Academy of Sciences, the Office of Economic Opportunity and the Department of Agriculture which established an experimental jojoba nut acreage in Southern California. Potentially this will lead to the development of a jojoba nut plantation on Indian reservations in both California and Arizona in the next five years. In this connection, in cooperation with the University of Arizona assisted in laying a foundation for an Indian owned and operated jojoba wax candle industry.

One of the more significant accomplishments involving industrial development assistance to Indians has been the groundwork laid for the establishment of a camouflage net factory at Devil's Lake, North Dakota. Again, this will be an Indian owned operation utilizing the management services of the Brunswick Corporation. The project includes a contract involving $125 million with a potential employment of over 200 Indian people.

The Bureau has just completed its third year as a participant in the Discover America Travel Showcase. The Bureau's exhibit, one of 26 in the display, was shown in 34 major enclosed mall shopping centers throughout the Southwest and Southeast regions of the country. The Showcase has generated over 17,000 requests for information on Indian tourism attractions and facilities in 1973.

Financial assistance was provided to the Angoon Community Association in Alaska to cover essential expenditures for the operation of the Angoon Fleet. This was necessary to prepare the fishing fleet for the 1973 fishing season, thereby preventing the loss of employment and income of this community.

A total of 1,975 Indian individuals participated in Fiscal Year 1973 in on-the-job training contracts with industries located on Indian reservations. It is estimated that this number will increase to 2,500 by the end of Fiscal Year 1974.

Some of the more notable accomplishments in the area of Indian arts and crafts development are: (1) completed initial presentations and began concentrated travel schedules of the extensive exhibitions Contemporary Southern Plains Indian Painting and Contemporary Indian Artists; Montana/Wyoming/Idaho, with catalogues published and distributed nationally by cooperating Native American enterprises; (2) produced, presented and published 25 one-person promotional sales exhibitions including an illustrated monograph for each; and (3) produced and distributed nationally over 20,000 copies of illustrated Source Directories promoting 100 Native American crafts marketing enterprises.

b. Credit: F.Y. 1974, $2,341,000; F.Y. 1975, $2,897,000; increase of $ 00. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$+556,000	-7	$2,897,000	131	Provide more adequate credit services and assistance to Indian people.

Cost Factors Involved in Increases

(1) $536,000 for additional contracts with Indian organizations to provide credit services to Indians.

(2) $20,000 to annualize the October 1973 Federal civilian pay raise.

Need for Increase:

There is an urgent need to strengthen the professional capability of Indian Tribes to provide adequate credit and financing services of all sorts to Tribal organizations and individual members. To this end, the increase will be distributed selectively to those field locations indicating a high priority for the credit program. These would be places that have no credit officer or places where the credit volume is increasing rapidly. Following is a summary of estimated total Indian financing needs:

SUMMARY OF TOTAL FINANCING NEEDS

As of June 30, 1973

1.	Housing (Other than loans to individuals, i.e., housing enterprises, apartments, rentals, group participation).		$24,917,500
2.	Financing of industrial development and group commercial enterprises.		231,010,440
3.	Financing of recreation development		73,536,300
4.	Financing of utility systems, transportation terminals, community buildings, civic facilities, and other governmental purposes for which tax-exempt bonds may be issued.		134,299,305
5.	Financing of group arts and crafts enterprises.		1,714,000
6.	Loans to individuals.		510,550,531
	(a) Land	$98,745,700	
	(b) Agriculture	88,939,800	
	(c) Non-Agriculture	26,511,900	
	(d) Housing	166,783,100	
	(e) Small Business	90,492,200	
	(f) Education	6,797,000	
	(g) Other	32,280,831	
7.	Tribal Land Purchase		105,227,000
8.	Expert Assistance		817,385
	Total Financing Needs		1,082,072,461

Program of Work:

The Credit Program strives to provide adequate capital to develop Indian resources to a point where Indians enjoy a suitable standard of living from their own productive efforts and to help them assume responsibility for utilization and management of their own resources. Technical services for financial management is an essential part of the program.

The total Indian financing needs are estimated currently at $1.08 billion as indicated in the table. This includes loan commitments of $13.3 million and authorized loan applications of $15.6 million, for a total of $28.9 million in approved and authorized loans. With only $3.3 million available in the Indian Revolving Fund for loans, there is a cash shortage of $25.6 million. The program of work in F.Y. 1975 is designed to meet these needs to the extent possible through direct loans from the Revolving Loan Fund and by locating other financing sources. It has been estimated that the F. Y. 1975 effort will result in an increase over the previous year of 4,000 assisted loans, totaling approximately $8 million; 500 Bureau supervised loans outstanding, with a value of $3 million; and 9,000 additional financial management counselling contacts.

Highlights of Recent Accomplishments:

During F.Y. 1973, 5,008 new BIA supervised loans were made totaling $11.7 million, with 8,660 loans totaling $67.4 million outstanding at June 30, 1973. The BIA also assisted in 23,040 loans from commercial sources totaling $24.3 million; and 1,496 loans from other Federal agencies totaling $37.7 million. Financial management contacts during the year totaled 47,166.

c. Direct Employment: F.Y. 1974, $14,741,000; F.Y. 1975, $15,435,000; increase, $694,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$+694,000	-38	$15,435,000	231	Increase program services to Indian applicants seeking permanent employment.

Cost Factors Involved in Increases

(1) $660,000 for direct employment services to an additional 290 individuals and families at an average cost of $2,275 per applicant.

(2) $34,000 to annualize the October 1973 Federal civilian pay raise.

Need for Increase:

Because of funding limitations in F.Y. 1974, it is estimated that about 300 individual applicants will not receive urgently needed direct employment services. The increase will provide services to this backlog in direct job placement, and primarily on reservations, thereby contributing toward alleviating in some measure the persistent unemployment problem.

Program of Work:

The Direct Employment Program is designed to aid Indian people who possess an employable skill to find and retain suitable employment. Due to the changing

employment scene and the emphasis placed on reservation development, it is expected that more training and employment opportunities will need to be explored and developed directly on reservations. In F.Y. 1975 the program of services will include: Family support services, orientation, career counseling, maintenance at destination, transportation to job and living site, medical care, personal appearance guidance, tools for employment, emergency assistance, home purchase program, solo-parent child care assistance, large family assistance. Also, the residential family training centers at Madera, California and Bismarck, North Dakota will continue operation. These are designed to meet the needs of a "hard core" minority of Indian people who because of low achievement, low education and lack of motivation cannot take advantage of the regular institutional training.

Highlights of Recent Accomplishments:

In F.Y. 1973 this program was redirected from providing urban oriented employment services to direct employment on or near Indian reservations with appreciable tribal involvement in determining major program services. As a result in that year, direct employment services were provided to 5,200 individuals and families and in F.Y. 1974 this number is expected to increase to 6,477.

d. Roads Maintenance: F.Y. 1974, $6,591,000; F.Y. 1975, $7,753,000; increase, $1,162,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$+1,162,000	-5	$7,753,000	287	To cover increased cost of road maintenance services.

Cost Factors Involved in Increases

(1) $1,120,000 for additional costs of approximately $50/mile for road maintenance services of the Indian road network involving some 22,740 miles.

(2) $42,000 to annualize the October 1973 Federal civilian pay raise.

Need for Increase:

The present level of funding ($280/mile) is about 36% of the detailed need, representing approximately one-third of what States and counties are spending ($775/mile) on similar type roads. The cost of materials, labor, fuel and equipment has risen approximately 12% over the past year. Also, the equipment used is unsafe and requires modification or replacement to meet the standards of the Occupational Safety and Health Act. Finally, the road construction program is presently increasing the road maintenance requirements at a rate of an additional $800,000/year.

Program of Work:

A detailed description of the services to be performed by this program is as follows:

a. Paved surface maintenance - 3,288 miles of 2-lane bituminous covered roadway, most of which has been constructed to this stage of completion in the past ten years. To protect the investment and provide safe travel, work features of maintenance include repairs to bituminous surface, drainage clean-out and corrections, bridge and culvert maintenance, vegetation control and roadside

cleanup, plus preventative measures to avoid severe damage by normal weather and traffic causes. These routes are the most heavily used by the Indian and reservation traffic. This item includes the maintenance of 6 paved surfaced air strips.

b. Gravel surface maintenance - 2,185 miles of 2-lane natural gravel or crushed rock wearing surfaced roads, part of which is in the stage of being constructed to become paved surfacing, due to traffic demands. A portion of this surface type will remain as gravel-covered roadway serving as farm to market all-weather routes, with about 50 percent of these routes being substandard low-service roads serving 2 to 6 families as access roads connecting to a higher surface type route. The level of maintenance being provided is on an intermittent basis due to the heavier demand on the resources to protect the investment on the paved surface routes.

c. Earth surface maintenance - 11,875 miles of 2-lane roads. Many of these routes were built to a level which is now below today's standards. Approximately 50 percent are now being maintained on a scheduled basis, with the remaining miles receiving maintenance on an "on call" or "demand" basis. These roads, including most other surface types were the basic system as established in 1933. They were built by CCC, WPA and other depression era activities of that period by the Bureau. This item includes the maintenance of 35 earth surfaced airstrips.

d. Access trails - 5,125 miles of single lane roads serving recreation, cattle operations, conservation, range, forestry and other land use features. These routes are seasonally maintained on an as-needed basis. Usually light work is done, such as fill washouts, clearing fallen timber, and making the road passable to truck traffic only.

Included in the above is the emergency work required to repair damages due to floods and natural causes (slides, cave-ins, etc.), which consists of 10 to 20 percent of the workload which is classified as unscheduled work and falls into the surface type category. The Bureau also maintains airstrips. The airstrips maintained are usually repaired while completing similar type of work on nearby roads.

In addition, bridge repair and maintenance is performed on 49,890 linear feet of bridges. This work is also accomplished when the need arises.

Highlights of Recent Accomplishments:

The maintenance services performed in Fiscal Year 1973 involved:

2,888 miles of paved surface roads
2,285 miles of gravel surface roads
12,175 miles of earth surface roads
5,125 miles of access trails roads
49,390 linear feet of bridges

e. Forestry and Agriculture: F.Y. 1974, $20,517,000; F.Y. 1975, $21,852,000; increase, $1,335,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+315,000	-18	$7,257,000	354	For forest protection needs and to sustain present level of timber sales activity.
(2)	+387,000	-8	4,422,000	147	For physical improvements critical to development of range units.
(3)	+633,000	-32	9,373,000	421	For urgent soil and water conservation improvement measures.
	+1,335,000	-58			

Cost Factors Involved in Increases

(1) $262,000 for additional prevention and presuppression needs, including seasonal fire control aids, lookouts, fire break construction, training in fire control, preparation of fire plans, firefighting equipment, etc.; $53,000 to annualize the October 1973 Federal civilian pay raise; total, $315,000.

(2) $365,000 for physical developments to improve range units; $22,000 to annualize the October 1973 Federal civilian pay raise; total, $387,000.

(3) $570,000 for the installation of soil and water measures critical to conservation needs; $63,000 to annualize the October 1973 Federal civilian pay raise; total, $633,000.

Need for Increase:

(1) Wildfire control efforts on Indian lands are greatly underfunded. Additional cost will be necessary in timber sales preparation and supervision in order to prevent detrimental effects on the environment caused by logging activities. In the event of another disastrous fire season, all of the increase would have to be used in protection activities, in addition to funds diverted from timber sales, forest management inventory, and other activities. This would inevitably have an adverse effect on the already curtailed income received by the Indian people from timber sales.

Timber sales receipts are the prime source of income on many reservations; however, Indian owners are losing as much as $4.3 million dollars a year in income from stumpage payments because of an underfunded timber sales program. The reservation communities are losing the social and economic benefits that would be generated by over 500 additional year-long job opportunities, which in turn would provide $3.3 million more in wages. In a time of good market conditions such as we are presently experiencing, the loss is magnified.

(2) In the past, programs of other federal agencies have supplied sizable amounts of funds for physical development of individual Indian rangelands. These funding sources have recently been substantially reduced, which will curtail physical developments. Further, sustained emphasis is essential for the educational and training phases of the range program if Indian people are to continue to adopt the management and development techniques necessary to achieve the full potential production of the Indian range resource. It is

essential that the technical services and range physical development be expedited if the Indian owners and their communities are to realize the benefits of the improved condition and proper utilization of Indian rangelands.

Inventories and other technical data indicates an average potential grazing capacity 50% greater than the current estimated proper stocking. Over a period of time, this potential can be reached through an understanding and application of the basic principles of prudent range management, and after the development of necessary physical range improvements.

(3) Approximately 9 million acres now have a moderately severe active accelerated erosion condition. This means that 25% to 75% of the top soil from these lands has been removed (lost and contributing to the pollution of our streams and lakes). Erosion prevention is basic to maintaining the productive capacity of these lands, and the resulting Indian income potential, as well as reducing the siltation of streams, lakes and reservoirs.

Program of Work:

The objective of Indian forest management is to realize from the forest resources, the highest economic and social services for the Indian owners, on a sustained basis. This basic objective is accomplished through:

1. Encouraging and assisting the Indians to participate in all phases of forestry activities through expanded employment and engagement in logging, wood-using and other business enterprises.

2. Protecting the forests from fire, insects, disease and trespass.

3. Developing the forests to harvest the full allowable cuts in accordance with sustained-yield forestry principles.

4. Applying forest cultural practices such as reforestation and timber stand improvement to raise the productive capacity of the forest lands and increase the allowable cut.

In consultation with the Indians, forest management work plans are related with other uses of the forests, such as grazing, recreation, and watershed management. Indian forests especially enhance the unique wildlife and recreational potentials on many of the Indian reservations. Development of these potentials would provide considerable income, employment, and business opportunities for Indians.

This subactivity also provides funds to pay the cost of suppression and emergency prevention of fires on or threatening forest and range lands on Indian reservations, and for emergency rehabilitation of burned-over areas which will not or have not naturally reseeded within a period of time to adequately prevent soil erosion, water pollution, siltation, and losses of watershed and other economic values. The amount included is a token amount for fire suppression and emergency rehabilitation activities; uncontrollable factors in this category make it necessary for the Bureau to submit a supplemental request to cover the actual costs of fire suppression. Obligations for the past five fiscal years were:

F. Y. 1969	F. Y. 1970	F. Y. 1971	F. Y. 1972	F. Y. 1973
$1,191,002	$1,032,413	$4,826,675	$6,935,015	$3,700,000

Obligations for Fiscal Year 1974 through December 31, 1973 were $3,343,695.

Range program services determine the condition and potential production capabilities of 42 million acres of Indian-owned rangeland; help Indian owners design plans for developing, managing, and utilizing this resource for livestock production while considering feasible benefits from wildlife, forests, recreation, watershed protection, farmsteads, and industrial and urban expansion. Range condition trend studies and forage utilization checks are made to determine needed adjustments in stocking rates, season of use, unit and pasture boundaries and to determine locations, sources, quality and location of range water and other rangeland development and improvement needs. Over 70% of all Indian rangelands are located in the arid southwest where range water deficiencies must be relieved by deep wells, paved catchment basins, and pipelines. Failure to provide this assistance or to make critical physical developments will adversely affect the already curtailed income of those Indians dependent upon the range resource for all or part of their livelihood.

The soil and water conservation program provides assistance for farm, ranch, watershed, and reservation planning for the utilization and development of Indian soil, water, and forage resources. These plans are based on information provided by soil and range inventories. Special emphasis will be placed on greater Indian participation in decision making relating to use and management of their agricultural resources. Technical assistance will be provided that furthers understanding on the part of Indian people of basic soil conservation principles. Such understanding is basic to the success of the program.

Working with Indian owners, conservation measures are designed to fit each set of soil, slope, and erosion conditions so as to: (1) correct ravages of erosion and depletion; (2) protect still-productive land against erosion and depletion; (3) improve productivity of the soil; and (4) control sediment. Such measures and good management on the part of land users make a maximum contribution to maintaining or increasing Indian income from their resources and to the Nation's environmental effort.

Today, non-Indians are producing and harvesting almost two thirds of the gross annual agricultural product from Indian lands. The program is designed to encourage and assist Indian owners to obtain the benefits from using and managing their own resources.

Highlights of Recent Accomplishments:

Timber cut under contract, paid permit, and special allotment timber cutting permit:

Fiscal Year	Volume Cut-MBM	Value
1969	974,332	$32,935,311
1970	776,402	26,885,540
1971	770,927	23,324,943
1972	927,188	37,952,965
1973	972,935	56,928,350
1974 Estimate	930,810	67,654,420
1975 Estimate	928,428	67,921,335

Land protected: Forest and range total - 59,515,515
Forest lands - 12,853,140

Number of fires suppressed: 1,945
Reforestation: 10,500 acres
Timber Stand Improvement: 31,400 acres

In 1972, Indian rangeland furnished over 7,600,000 animal unit months of grazing. This produced livestock products with a gross value of $77,600,000 of which $58,500,000 was produced by Indian ranching operations. This was an increase of $15,200,000 and $13,500,000 respectively over 1968. The total use of Indian rangeland by Indian stockmen increased from 90% in 1968 to 92% in 1972.

The Bureau has completed soil and range inventories on approximately 92 percent of the open Indian land to be mapped. Approximately 6 million acres of Indian land are now being managed in a manner that allows maximum production and utilization of production consistent with sound environmental management.

f. Minerals, Mining, Irrigation and Power: F.Y. 1974, $1,612,000; F.Y. 1975, $3,149,000; increase, $1,537,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+1,000,000	-	$1,000,000	-	Mineral inventories on Indian lands with emphasis on energy resources.
(2)	+537,000	+1	2,149,000	8	To maintain essential operation and maintenance work in Indian Irrigation systems.
	+1,537,000	+1			

Cost Factors Involved in Increases

(1) Initiation of a new program for inventory of Indian energy minerals and resources; $1,000,000.

(2) Increased costs of operations and maintenance work, and increased uncollected assessments, $537,000.

Need for Increase:

Coal, geothermal, oil shale, uranium and other energy resources occur on Indian reservation lands. The President has issued directives to Federal public land agencies, and the States are being encouraged to develop long-range programs for all energy resources within their jurisdictions based upon a thorough analysis of the Nation's energy needs, environmental and economic objectives. It is imperative that the trustee initiate similar programs on Indian lands. The $1,000,000 for mineral inventories is the first stage in an accelerated program which will directly involve the Indian in developing specific energy initiatives on a reservation-by-reservation basis.

The increase of $537,000 to maintain operation and maintenance services in Indian Irrigation systems in fiscal year 1975 is to cover the payment of annual operation and maintenance charges assessed against Indian-owned lands included within various private and public irrigation districts and water user charges; annual contract payments authorized by the Congress; and annual operation and maintenance costs for those projects not included within private or public irrigation districts and water user associations.

Program of Work:

The intensified minerals and mining program for fiscal year 1975 will involve an inventory of existing mineral leaseholds, reports, studies and data prepared by Federal agencies, colleges and universities, and private sources concerning all Indian mineral resources. The data collected will be analyzed for each reservation and made available to the tribal or individual Indian landowner to assist them to utilize their mineral resources to their maximum benefit. In subsequent years this will provide for informed Indian involvement in decisions concerning development, utilization and marketing.

The irrigation and power program provides funds to pay the operation and maintenance assessments for those Indians who are financially unable to pay their assessments. Paying the assessments for those Indians who are financially unable to pay will provide those water users both Indian and non-Indian who have paid their assessments, adequate and proper operation and maintenance services for which they were required to pay in advance. Also, proper and adequate maintenance avoids unnecessary and costly crop failures. Continued neglect of the system because of inadequate funds will eventually require major rehabilitation costs.

All collections from water users are deposited in the operation and maintenance receipt account and are available for operating and maintaining the respective projects pursuant to the provisions of the Act of August 7, 1946 (60 Stat. 895). These collections include payments by Indian and non-Indian water users and payments made on behalf of Indian water users who are financially unable to pay their assessment for current annual operation and maintenance. Collections from Indian water users for prior year assessments which have previously been paid from reimbursable appropriated funds are deposited directly into the Treasury to the Miscellaneous Receipt Account as a repayment of reimbursable indebtedness. Where non-Indians receive water services from Indian irrigation systems, they are required to pay the full per acre cost.

Indian irrigation systems and projects fall in the following categories:

1. Projects which are economically feasible on the basis that there is a sufficient quantity of water to supply the assessable area. The lands have characteristics which will produce crops under sustained irrigations and have repayment capabilities which will permit landowners and water users as a whole to pay the full annual cost of the operation and maintaining the system. The assessment rates on these projects are fixed to return the full operation and maintenance costs. Any unpaid assessment becomes a lien against the land for which the assessment is not paid. Funds requested under this appropriation for payment of assessments under this category will be used when necessary to pay into the Collection Account that part of the uncollectible current annual per acre assessment against Indian-owned lands. Funds so paid into the Collection Account to cover such unpaid assessments become reimbursable debts due to the United States.

2. Projects where the repayment capabilities of the land will not permit payment of the full annual operation and maintenance costs. Assessment rates for Indian water users on these projects are based on the ability of the Indian to pay and therefore do not cover the full cost of operation and maintenance. All or any portion of any unpaid assessment becomes a lien against the land for which such assessment is not paid. Funds requested for payment of costs under this category will be used when necessary to pay into the Collection Account that part of the annual operation and maintenance cost on Indian-owned lands in excess of the annual assessment and any part of the uncollectible annual per acre assessment against Indian-owned lands. Funds so paid into the Collection Account to cover these costs become reimbursable debts due the

United States when used to pay all or any part of the annual costs included in the assessment rate. Costs in excess of the assessment rate are non-reimbursable.

3. Irrigated areas, such as subsistence garden tracts and tracts of a few acres which do not represent economical units, but provide Indian landowners with a means of supplementing their livelihood. Because of the low income of the Indian landowners and water users on these irrigated areas and tracts, it is not feasible from an economic standpoint to assess these lands. Accordingly, the operation and maintenance costs are non-reimbursable and do not become a lien against the lands benefited. Funds requested for payment of costs under this category will be used when necessary to pay into the Collection Account the total cost for operation and maintenance of these subsistence garden tracts and irrigated areas, or if no Collection Account has been established and it is not desirable or proper to establish such an account, the funds will be expended when necessary directly from the appropriation account.

4. Irrigation systems and reservoirs serving Indian-owned lands located within and operated by various private and public irrigation districts and water user associations. Assessments for operation and maintenance of the irrigation systems and reservoirs serving these Indian-owned lands are made by the irrigation district or water users' association embracing and serving such Indian-owned lands. Funds requested for payment of assessments under this category will be used when necessary to pay into the Collection Account for payment to private and public irrigation districts and water users associations for operation and maintenance costs assessed for Indian-owned lands included within such irrigation districts and water users associations. Funds used for payment of assessments covering these costs are reimbursable and become debts due the United States except for those payments that are non-reimbursable by legislation.

5. Projects that are operated by this Bureau at no cost to the Indian land-owners and water users as provided for under legislation. Funds requested for payment of assessments under this category will be used when necessary to pay into the Collection Account appropriated funds for irrigation projects operated by this Bureau at no cost to the Indian water users as required by legislation.

4. Trust Responsibilities and Services

Subactivity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
(a) Indian Natural Resources Rights Protection.....	$1,912,391	$2,302,000	$3,331,000	+$1,029,000
(b) Real Estate and Financial Trust Services.....	11,204,729	12,142,000	14,554,000	+2,412,000
Total.....	13,117,120	14,444,000	17,885,000	+3,441,000

a. Indian Natural Resources Rights Protection: F.Y. 1974, $2,302,000; F.Y. 1975, $3,331,000; increase, $1,029,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	+$868,000	+1	$2,643,000	11	To increase the number of water inventories and plans, and support necessary litigation.
(2)	+161,000	-7	688,000	33	To provide technical services required by NEPA.
	+1,029,000	-6			

Cost Factors Involved in Increases

(1) To process an increased number of water rights inventories and plans, and to acquire data to support additional litigation, $866,000; to annualize the October 1973 Federal civilian pay raise, $2,000; total, $868,000.

(2) To make additional environmental examinations, assessments, and statements, $156,000; to annualize the October 1973 Federal civilian pay raise, $5,000; total, $161,000.

Need for Increase:

In fulfilling its role as trustee of Indian lands and related resources aggressive and effective action is demanded of the Government to protect the rights of Indians in those resources. As pressures mount on scarce resources, especially water and energy resources, program efforts must be expanded to assure that Indian rights are effectively protected. Further, it has been determined that the provisions of the National Environmental Protection Act of 1969 are included within the trust responsibilities of the Government, dramatically increasing the trust services workload.

Program of Work:

This program area includes the function of directing every aspect of the Interior Department's effort to assert and protect the water rights of Indians, i.e. to: (1) identify all Indian water rights problems on every federally recognized land base (277 reservations); (2) develop technical information and

comprehensive lists of potential land and water uses for Indian reservations and communities needed to develop economically, including nature of and location of such use; (3) coordinate initiating action, both initial or corrective, needed to establish or defend Indian water rights, including drafting regulations, reports or proposed legislation; (4) coordinate the preparation of water adjudication suits for submission through the Interior Department Solicitor to the Department of Justice; (5) monitor and plan strategy in State water rights cases having impact on Indian water rights; (6) coordinate, guide and supervise the Department's agencies, Bureau field staffs, and tribes, and advise and inform tribal attorneys, in all Indian water rights efforts; and (7) carry out all above activities with continuing consultation with the National Indian Advisory group, established by the Secretary of the Interior. The order of carrying out such activities will be to:

1. Accumulate information to support actions in Indian water rights matters currently in litigation.
2. Acquire specific data to supplement and support any litigation where encroachment of Indian resources is threatened or imminent.
3. Gather and record information necessary for Indian participation in the Western U. S. Water Plan.
4. Gather data to inventory Indian water resources and needs in all other federally recognized land base reservations.

The Bureau is charged by the National Environmental Policy Act of 1969, and various regulations, with the preparation and submission of environmental impact statements when a proposed action or activity is determined to be a major federal action having a significant effect on the quality of the human environment. The work program includes consulting with Indian tribes; consulting, assisting, reviewing, and commenting on environmental statements prepared by other agencies; monitoring on-going activities; examining proposed actions or activities to establish conformance with NEPA; preparing environmental assessments; preparing environmental statements, with public hearings and review procedures established by the Council on Environmental Quality.

Prior to the Davis vs. Morton Decision of the Tenth Circuit Court, the Bureau's environmental workload had been concentrated in the direct Bureau activities or operations, and the review, comment and coordination with other agencies and Indian tribes when Indian trust lands and rights were involved. This decision now requires that trust actions conform with provisions of NEPA. Problems are identified with the numbers of determinations required and the number of assessments and statements now needed to support our trust responsibilities.

The following table provides selected program workload and performance data:

Item	1973 Actual	1974 Estimate	1975 Estimate
Indian trust land (mil. ac.).....	50.5	50.5	50.8
Rights protection services:			
Water rights inventories completed: a/			
Phase I (no.).....	24	31	55
Phase II (no.).....	1	15	30
Phase III (no.).....	0	1	1
Litigation cases:			
Filed or appealed (no.).....	10	4	8
Adjudicated (no.).....	0	1	4

Item (Cont.)	1973 Actual	1974 Estimate	1975 Estimate
Environmental Protection Services:		(Estimated)	
Examinations completed (thousands)....	30	50	50
Assessments completed (no.).....	0	30	50
Statements completed (no.).....	0	2	4
Statements reviewed (no.).....	200	260	300

a/ Water rights inventory phases are defined as follows:

Phase I -Identification of water resource base.
Phase II -Identification of present and future water requirements.
Phase III-Plan formulation and selection of programs or projects to satisfy present and future reservation water requirements.

b. Real Estate and Financial Trust Services: F.Y. 1974, $12,142,000; F.Y. 1975, $14,554,000; increase, $2,412,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	+$1,304,000	+3	$9,675,000	453	To provide critically needed real estate services and reduce backlog of 30,000 cases.
(2)	+813,000	-4	3,045,000	117	To provide critically needed real estate appraisal services in a program with an increasing backlog.
(3)	+295,000	-4	1,834,000	128	Additional services and equipment needed to carry out financial trust services.
	+2,412,000	-5			

Cost Factors Involved in Increases

(1) For additional contractual and personal services to process approximately 15,000 additional lease and other real estate transactions at $82 per transaction, $1,236,000; to annualize the October 1973 Federal civilian pay increase, $68,000; total, $1,304,000.

(2) For contracts to prepare approximately 2,650 appraisal reports at $300 per report, $795,000; $18,000 to annualize the October 1973 Federal civilian pay raise; total, $813,000.

(3) $276,000 for improved equipment and additional contractual services in field offices to service an estimated additional $20 million in individual Indian money accounts; $19,000 to annualize the October 1973 Federal civilian pay raise; total, $295,000.

Need for Increase:

The increase is needed in order to keep pace with the increasing number of real estate and financial transactions caused by tribal, Bureau, and other government agencies' programs. Indian landowners universally manifest an intense interest in their landholdings, regardless of whether a small fractionated interest or a large acreage is involved. They request, demand, and very properly

expect prompt and efficient action when leases, partitions, exchanges, probate actions or other related matters are needed. As trustee, the Government would be in an untenable position if it did not provide the quantity and quality of services expected of the trustee. The requested funds for 1975 will provide for steps toward a well-balanced trust services organization that will provide prompt and efficient services. The increases included are based primarily on the priorities expressed by Indian tribes through a formalized planning-budget formulation process that provides explicitly for tribal participation. Proposed funding levels reflect stated tribal priorities within the context of Federal expenditure decisions.

Program of Work:

In addition to the needs of individual Indians and tribes for real estate services, other public programs are concerned with the use or development of Indian lands. Examples include water rights protection, road construction, housing development or improvement projects, etc. Each of these requires some or all of the Bureau's real estate services support capabilities, such as title and records certification, preparation and finalization of appraisals, rights-of-way, deeds, leases, permits, decedents' family history data, estate trust or restricted property inventories, etc.

The protection of the environment is finally recognized as an issue of major importance, necessitating preplanning, inspection and compliance programs to bring into balance economic gains and long-term effects on the environment. Currently, coal and copper strip-mining operations, fossil fuel electrical generation, uranium mining and milling, agricultural development, industrial plants, and commercial operations are critical areas needing close supervision and continued monitoring for lease compliance. The environmental standards and protection provisions of the lease require a compliance and inspection program to fulfill the Governments responsibility as trustee.

The appraisal work program of the Bureau consists of professional appraisals, valuation counseling, land use planning, feasibility analysis and in some cases, HUD #701 grant land planning coordination. The appraisal of real estate is by far the largest and most important element in the program. The total normal workload of approximately 20,000 appraisals is for leasing arrangements, land acquisitions, land disposals, patents in fee, gift deeds, rights-of-way to State, Federal and county governments, easements for utilities, and land exchanges. At the present time, we are able to accomplish approximately 11,000 appraisals per year, leaving approximately 9,000 transactions without appraisal reports.

The Bureau is charged by various laws and regulations with the trust responsibility of accounting for and disbursing individual Indian monies which come into the custody of Bureau officials as a result of leasing and/or sale of trust property; from the sale of forest and other products produced on trust property; and the disbursement of per capita payments, judgments, awards, and claims. Indian Service Special Disbursing Agents are designated to carry out these responsibilities. In addition, field representatives serve as contact with Indians at the reservation level to perform work connected with the administration of trust properties.

The following table provides selected program workload and performance data:

Item	1973 Actual	1974 Estimate	1975 Estimate
Indian trust land (mil. ac.).....	50.5	50.5	50.8
Intermingled Government land (mil. ac.)	2.2	2.2	2.2
Lease and permit income from trust land (mil. $).....	$62.0	$74.3	$89.2
Real estate trust services:			
Cadastral surveys (miles).....	150	300	300
Appraisals (no.).....	10,986	13,150	15,800
Surface leases and R/OW actions serviced.....	52,631	63,200	75,800
Subsurface leases serviced.....	13,843	16,600	19,900
Land title conveyance actions serviced.....	9,755	11,700	14,000
Financial trust services:			
Tribal accounts serviced (mil. $)...	$345.5	$330.0	$325.0
Individual Indian money accounts serviced (mil. $).....	$123.0	$130.0	$150.0

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OPERATION OF INDIAN PROGRAMS

5. General Management and Facilities Operations

Subactivity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
(a) Management and Administration	$ 8,465,000	$ 8,571,000	$ 9,106,000	$+ 535,000
(b) Program Support Services	1,357,000	1,435,000	1,685,000	+ 250,000
(c) Facilities Management	38,013,555	40,355,000	46,163,000	+5,808,000
(d) Direct Tribal Facilities Operations	4,169,000	3,325,000	6,039,000	+2,714,000
Total	52,004,555	53,686,000	62,993,000	+9,307,000

Subactivity	Bureau Assistance Programs FY 1974	Bureau Assistance Programs FY 1975	Contracts and Grants to Indians FY 1974	Contracts and Grants to Indians FY 1975	Total Program FY 1974	Total Program FY 1975	Increase (+) or Decrease (-) 1975 Compared with 1974
(a) Management & Administration	$ 8,571,000	$ 9,106,000	$- - -	$- - -	$ 8,571,000	$ 9,106,000	$+ 535,000
(b) Program Support Services	1,435,000	1,685,000	- - -	- - -	1,435,000	1,685,000	+ 250,000
(c) Facilities Management	40,355,000	46,163,000	3,325,000	6,039,000	43,680,000	52,202,000	+8,522,000
Total	50,361,000	56,954,000	3,325,000	6,039,000	53,686,000	62,993,000	+9,307,000

(a) Management and Administration: F.Y. 1974, $8,571,000; F.Y. 1975, $9,106,000; increase $535,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+535,000	+4	$9,106,000	293	For increased costs in supervising & monitoring contract operation and for reservation level annual program planning & development.

Cost Factors Involved in Increase

(1) Annualization of pay cost due to E.O. 11739 (averaging 4.77%) is reflected in the requested increase. Increased positions unit cost factor is $25,850 including salary (GS-13/1), EBC (10% of salary), and associated operating costs (15% of salary).

Need for increase:

Increasing emphasis on contracting of Bureau programs with Indian tribes, organizations and individuals has created a situation whereby the contract negotiation, preparation, supervision and monitoring function is not adequately staffed and funded. With $129,000 of the requested increase in funds and an additional five (5) positions the Bureau will be able to more effectively implement the contracting of Indian programs to Indians as they desire. The increased staff will be utilized at the Central Office level to set contracting procedures and policies and to supervise and monitor the Bureau-wide efforts of increased contracting in FY 1975.

Approximately $48,000 of the increased funds are required to annualize the effects of additional pay costs due to E.O. 11739. These funds will allow maintenance of FY 1974 program levels for the management and administrative functions involved.

Approximately $358,000 of the requested funds will be utilized to increase services at the reservation level for the program planning and development function. The increased funds will be distributed to expand programs as indicated by the priorities established by Indian tribes. It is anticipated that the overall program planning and development effort can be accomplished in FY 1975 with a reduction of one (1) position. Therefore, the net increase in positions for the subactivity is four (4) positions.

Program of work:

The program provides for executive direction and other general management and administrative functions at the Washington and Albuquerque Headquarters such as policy formulation; development of systems and procedures; program planning, development and budget; legislative development; public information; program audit and review; accounting management; property and supply; personnel management; records and communications; management research; and contract supervision and monitoring. These functions are involved in the support of the many programs of the Bureau. Administrative costs involved in the operation of a centralized accounting, payroll and data processing system; the Area Offices; and the Reservation Management at the agency level are charged to program funds.

The program provides for a management evaluation system which accomplishes scheduled and recurring checks and measurement of the effectiveness and responsiveness of Bureau program administration, with emphasis on management by objectives, at all organizational levels. The system schedules on-site visits to Bureau field installations by evaluation teams. Evaluation teams include Bureau headquarters and field personnel, tribal representatives and non-Bureau personnel. Obtaining the opinions and observations of tribal governing bodies during the general evaluation is stressed.

The program provides for a program planning and development function which primarily directly serves the reservation or agency level. The activities involved divide into three general areas of work:

(1) Gathering, assembling and analyzing basic demographic, social and economic data on a reservation-by-reservation basis for use in program analysis and development. Close cooperation is maintained with the Bureau of the Census and other data sources. Work outputs include the semi-annual Labor Force Report, contributions to the annual program and financial plan, and special reports as required.

(2) Assisting Indian tribes in the preparation of annual program plans, with supporting analytical studies, for each operating entity of the Bureau. Analytical studies at the reservation level are important elements of the work. They evaluate program alternatives to provide a basis for sound decisions by Indians on the best methods of achieving their objectives and setting program priorities. The Bureau-wide consolidation of these program plans, with supporting analytical studies, is used within the Department as a basis for budget decisions and to support the Department's presentations to the Office of Management and Budget. The work includes developing and maintaining the Bureau-wide Planning-Programming-Evaluation Data System to provide funding, staffing and accomplishment information for the annual program plan. The system provides for periodic updating of program plans to reflect decisions made during the budget cycle on funding and staffing levels.

(3) Continuing efforts to improve the Bureau's and tribes' data bases and to provide for modern data gathering and usage systems to improve information available to the Bureau and the tribes to make management decisions.

Highlights of recent accomplishments:

(1) During FY 1974 the Bureau's fiscal management systems are being revamped to improve accounting efficiency and to provide for a functional classification of costs. The use of a functional classification in addition to the existing object classification will provide to the Bureau's management levels cost information more related to what work the Bureau does. This information should lead to more effective management decisions in accomplishing the goals and objectives of the Bureau. In addition, the functional cost classification and the Bureau's budget structure are being brought into conformance.

(2) A plan of action for a comprehensive Bureau-wide management evaluation system has been developed and pilot evaluations will be conducted before the end of Fiscal Year 1974.

(3) The Planning-Programming-Evaluation Data System is currently being modified to be fully integrated with the finance system. The functional classification used to record cost information will also be used as program components in the planning and budgeting cycle. During the current year a concerted effort is being made to revise and improve the accomplishment portion of the PPE system. Field levels were canvassed to identify valid work accomplishment measures. The selected accomplishments will be used in planning efforts for the FY 1976 budget cycle.

(4) Indian involvement and participation in the program planning decisions of the Bureau has again been stressed and up-graded. Local Indian priorities for the FY 1975 Bureau budget were determined on an agency-by-agency basis by means of a priority analysis system. These priorities were used to help develop the distribution of FY 1975 funds down to the local level on a program-by-program basis. To familiarize Indian leadership with the Federal budget process in general and the Department and Bureau processes in particular, a budget formulation and program planning workshop was developed for use at the Agency level as a preliminary step to the FY 1976 budget cycle. The workshop's major emphasis is to assist Indian leaders in how to establish local priorities relating to the Bureau's programs under constrained funding levels.

(5) The Indian Information System, a reservation-based resources information and management system, is being expanded to two additional reservations. Data is now being provided from the Blackfeet and Fort Belknap Reservations on the land and human resources of these reservations. The system should provide these tribes with management information to foster their self-development. The computing system requirements of the IIS system are being evaluated so that it can eventually be expanded to all reservations requesting it.

(b) Program Support Services: F.Y. 1974, $1,435,000; F.Y. 1975, $1,685,000; increase $250,000. The increase consists of:

Increase (+) or Decrease(-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $140,000	- -	858,000	33	Provide funds toward meeting the Bureau's safety needs.
(2) 110,000	- -	827,000	--	Provide funds to reimburse the Employee Compensation fund.
$250,000	- -			

Need for increase:

(1) The increase of $140,000 will provide limited funds toward meeting the safety management needs of the Bureau. The funds will be used to purchase safety-related supplies, materials and equipment in support of the program.

(2) The increase of $110,000 provides for uncontrollable cost increases due to higher salary base for compensation, cost of medical care, and cost of living increases related to employee compensation claims.

Program of work:

(1) The program includes funds for the Bureau Safety Management Program which covers the safety activities required under Title 5, U.S.C., Section 7902, under P.L. 91-596, "the Occupational Safety and Health Act of 1970"; P.L. 91-54, "Construction Safety Act of 1969"; and Executive Order 11612. The total safety management activities cover approximately 17,000 employees, 55,000 Indian and Alaskan Native students, and 500,000 Indian/Alaskan Natives residing on or near Indian lands and/or Indian/Alaskan Native communities.

The Safety Management Program assists tribal councils, Indian-owned enterprises and all Bureau facilities to meet safety standards. The extremely high loss of lives, and severe economical impact upon Indians and their enterprises and/or communities, along with the human suffering from all accidents, which are preventable, can no longer be ignored or by-passed. The prime responsibility of the U. S. Government in its trust responsibility to the Indians is the protection and safety of Indian lives and their property.

The Indian people are entitled to the same "protectivity" as P.L. 91-596 provides for men and women employed by Federal agencies and private enterprises.

Since 1952, 66 employees have been killed by work-connected accidents within the Bureau through 1972. During the same period 1952-1972, 6,537 employees have been injured sufficiently to be off-the-job for one day or more; many employees were permanently injured. Cost estimates for fatalities/injuries losses are estimated at $115 million for the period 1952-1972.

(2) The program includes funds to reimburse the Department of Labor for employee compensation payments made due to injury or death of employees under the jurisdiction of the Bureau as required in Section 209 of P.L. 86-767.

Highlights of recent accomplishments:

(1) Industrial hygiene surveys were conducted at all installations for the five target health hazards. Training of employees in their rights and responsibilities for OSHA was completed. Training was conducted under the requirements of the Construction Safety Act and OSHA for 480 employees as required by the Department of Labor. A safety service contract was developed and initiated with the National American Indian Safety Council. This fiscal year 750 safety inspections have been completed.

(c) Facilities Management: F.Y. 1974, $43,680,000; F.Y. 1975, $52,202,000; increase $8,522,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+ 400,000				Repair and maintenance of newly constructed buildings and utilities, and related costs.
(2) +1,500,000				Increased cost of labor, materials and services for repair and maintenance of buildings and utilities.
(3) +1,375,000				Increased cost of fuel, utilities, labor and services for operation of facilities.
(4) +5,247,000				Provision of space and facilities under P.L. 313, The Public Bldgs. Amendment Act of 1972.
$+8,522,000	-111	$52,202,000	1,770	

Cost Factors Involved in Increases

(1) Approximately 400,000 square feet of newly constructed buildings and related utility systems will be placed into operation during Fiscal Year 1975 at a first year cost of about $1.00 per square foot.

(2) and (3) Cost indexes developed by Engineering News-Record indicates increased cost for the following:

Element	% Increase 6/30/72 to 6/30/73
Building Costs	+ 7.6%
Common Labor	+ 4.8%
Skilled Labor	+ 3.9%
Materials	+16.1%

Need for increase:

(1) The $400,000 is requested for repair and maintenance of newly constructed buildings and utilities. Our evaluation of new facilities maintenance needs, as well as data developed in the maintenance industry, indicates first year costs are from 75% to 90% greater than subsequent year requirements. New equipment and operating problems during the break-in period, require maintenance which is vital if the new facilities are to be placed into untroubled, useful service and if the Government's investment is to be protected.

(2) The $1,500,000 is requested for increased cost of labor, materials and services related to repair and maintenance of existing Bureau facilities. The program will provide a 60% level of repair and maintenance without furthering efforts to reduce the current backlog of major repair projects, currently estimated at approximately $25,000,000.

(3) The $1,375,000 requested for facilities operations will provide funds to meet a limited portion of the increased costs for basic services and supplies presently experienced throughout the nation.

(4) The $5,247,000 represents the funds required in Fiscal Year 1975 for space provided by GSA in GSA owned or leased facilities and for space leased directly by the Bureau of Indian Affairs under leasing authority granted by the GSA.

Program of work:

The repair and maintenance of buildings and utilities is a continuing program. The funds requested for this portion of the program will provide a minimum level of repair and maintenance of Bureau plant facilities located throughout the United States including Alaska. The Bureau operates and maintains approximately 8,550 individual buildings containing 28,900,000 square feet of floor area together with related utility systems to support facilities at 400 separate locations. Seventy-eight boarding schools, 19 dormitories and 121 day schools are among the facilities maintained and operated over an area stretching from Alaska to Florida. The average age of these facilities is in excess of forty years. Utilities operated and maintained at most agencies, which are frequently in a remote location, are equivalent to those of an average community and many are much more extensive due to central plants which provide electric power, hot water, steam, etc. In addition to normal operating requirements, these systems must be operated and maintained on an uninterrupted 24-hour basis to insure the health and safety of Indian school children and Bureau personnel.

The facilities operations portion of the program provides for the operation of utility systems to furnish necessary utilities and for operational services. The program includes the cost of personal services, material, supplies, vehicle operation, equipment replacement, upkeep of all tools and equipment used in furnishing utilities and operational services purchased from commercial or non-Bureau sources. Most of the Bureau's installations are in isolated locations, lacking the normal utilities and services usually available. This requires that the Bureau provide such essential utilities and services as

electricity, water, sewage, janitorial, grounds care, heat, garbage and refuse disposal, etc. The facilities operations funds requested will provide an austere level of operation of Bureau facilities located throughout the United States including Alaska.

Public Law 91-313, "Public Building Amendments Act of 1972", requires that all agencies be charged for space and related services provided by GSA at approximate commercial charges for comparable space and services that may prevail as of July 1,1974. Cost rates are based on "standard level user charges" for various types of building space, e.g. office, storage, parking and special use categories on a square foot unit cost. The Bureau of Indian Affairs currently occupies 1,127,443 square feet of space in GSA controlled facilities and/or leased facilities and $5,247,000 represents the total funds required for this space.

Highlights of recent accomplishments:

(1) In Fiscal Year 1974 work continues on engineering performance standards and guides. Facilities Management manuals are being revised, plant facility inventories and useful life data have been updated.

(2) Facilities Management programs service 400 locations involving buildings and utilities. 78 boarding schools, 19 dormitories and 121 day schools are among the facilities operated and maintained over an area stretching from Alaska to Florida.

(3) During Fiscal Year 1974, plans will be developed for a "Total Rehabilitation Program" at selected Bureau locations. The "Total Rehabilitation Program" will incorporate repair and maintenance funds and major alterations and improvement construction funds, to place all of the facilities in good usable condition at one time. In this manner, repairs and renovations on an "as needed" basis will be held to a minimum and a preventative maintenance program will keep the facilities in a sound operational condition thereafter. Due to the advanced age of Bureau facilities, the present level of funding has provided a minimum repair and maintenance program and does not lend itself to a "Total Rehab Program" approach. Plans and estimates are now being prepared to pilot this program when funds become available.

ITEMIZATION OF ESTIMATE

Department of the Interior
Appropriation Title: Operation of Indian Programs — Bureau of Indian Affairs

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) Decrease (-)
Program and Financing:				
Total obligations	$390,895,362	$413,065,508 1/	$453,807,000	+$40,741,492
Contract authorization 58 Stat. 266	-1,500,000	-1,500,000	-	+1,500,000
Applied to contract authorization 58 Stat. 266	+271,192	+793,492	-	-793,492
Unobligated balance lapsing	8,456,446	-	-	-
Appropriation	398,123,000	412,359,000 1/	453,807,000	+41,448,000
Obligations by Objects:				
11 Personnel compensation	160,083,824	176,132,000	162,240,000	-13,892,000
12 Personnel benefits	15,981,513	17,560,000	16,235,000	-1,325,000
21 Travel and transportation of persons	9,854,212	9,900,000	10,000,000	+100,000
22 Transportation of things	3,707,865	4,000,000	5,000,000	+1,000,000
23 Rent, communications and utilities	8,114,847	9,000,000	14,769,000	+5,769,000
24 Printing and reproduction	547,554	750,000	950,000	+200,000
25 Other services	99,492,749	95,492,000	126,981,000	+31,489,000
26 Supplies and materials	29,124,101	30,999,508	35,500,000	+4,500,492
31 Equipment	4,467,819	5,000,000	5,000,000	-
32 Lands and structures	435,066	300,000	300,000	-
41 Grants, subsidies, and contributions	62,193,428	67,100,000	80,000,000	+12,900,000
42 Insurance claims and indemnities	38,266	-	-	-
Subtotal	394,041,244	416,233,508	456,975,000	+40,741,492
Deduct quarters and subsistence charges	-3,145,882	-3,168,000	-3,168,000	-
Total Obligations	390,895,362	413,065,508	453,807,000	+40,741,492

1/ Includes $15,338,000 proposed pay cost supplemental.

PERSONNEL SUMMARY

Operation of Indian Programs

	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions	14,575	14,173	13,002
Full-time equivalent of other positions	1,954	1,967	1,950
Average number of all employees.	14,173	14,349	13,173
Average GS grade	7.6	7.6	7.6
Average GS salary	12,042	12,660	12,787
Average salary of ungraded positions	9,535	10,155	10,815

BUREAU OF INDIAN AFFAIRS

Construction

Appropriation 1974		$54,723,000
Transferred to other accounts		-116,065
Appropriation (adjusted)		54,606,935
Unobligated balance from prior year		39,155,658
Total available for obligation		93,762,593
Decreases:		
Buildings and utilities	$67,833,898	
Irrigation systems	25,399,062	
Land acquisition	633	
Direct Indian operations	529,000	93,762,593
Subtotal		-
Increases:		
Buildings and utilities	26,832,000	
Irrigation systems	24,514,000	
Direct Indian operations	529,000	
Total available for obligation		51,875,000
Budget Estimate 1975		51,875,000

BUREAU OF INDIAN AFFAIRS

Construction

Analysis by Activities

Activity	Amount Available 1974	Fiscal Year 1975			Total available 1975 compared to total available 1974
		Estimated Total Available	Unobligated balance from 1974	Budget Estimate	
1. Buildings and utilities.....	$67,833,898	$26,832,000	-	$26,832,000	-$41,001,898
2. Irrigation systems.....	25,399,062	24,514,000	-	24,514,000	-885,062
3. Direct Indian operations....	529,000	529,000	-	529,000	-
4. Land acquisition.....	633	-	-	-	-633
	93,762,593	51,875,000	-	51,875,000	-41,887,593

Activity	Bureau Assistance Programs		Contract and Grants to Indians		Total Programs	
	FY 1974	FY 1975	FY 1974	FY 1975	FY 1974	FY 1975
1. Buildings and utilities.....	$67,833,898	$26,832,000	$521,000	$521,000	$68,354,898	$27,353,000
2. Irrigation systems.....	25,399,062	24,514,000	8,000	8,000	25,407,062	24,522,000
4. Land acquisition.....	633	-	-	-	633	-
	93,233,593	51,346,000	529,000	529,000	93,762,593	51,875,000

1. Buildings and Utilities $27,353,000

Construction of Facilities

This program provides construction funds for additional kindergarten classrooms and quarters; construction of Diomede Day School, Diomede, Alaska; completion of Grey Hill High School, Tuba City, Arizona; construction of student housing, Haskell Indian Junior College, Lawrence, Kansas; additional funds for the Navajo Community College, Tsaile Lake, Arizona; construction of Navajo Irrigation building, New Mexico; for advanced planning, design, and drawings; for water exploration and development; for technical assistance and service; and for the purchase of equipment for projects previously funded for construction.

A summary of projects by States and justification for each follows:

Buildings and Utilities Construction Program, Fiscal Year 1975

Summary of Projects by States	Estimated Cost
New Construction	
Alaska	
Diomede Day School	$1,000,000
Arizona	
Grey Hill High School Completion (III)	6,500,000
Navajo Community College	1,000,000
Arizona Total	$7,500,000
Kansas	
Haskell Indian Junior College (III)	$2,850,000
New Mexico	
Navajo Irrigation Building	$1,000,000
Bureau-wide	
Kindergarten classrooms and quarters	1,988,000
Planning and Design	720,000
Water Exploration and Development	100,000
Deferred Equipment	2,895,000
Technical Assistance and Services	3,500,000
Total, New Construction	$21,553,000
Major Alterations and Improvements	5,800,000
Total, Construction, Buildings & Utilities	$27,353,000

DIOMEDE DAY SCHOOL, Alaska $1,000,000

Location: Little Diomede Island in the Bering Straits about half way between the Seward Peninsula and the Chukchi Peninsula of the Soviet Union. Three miles from Soviet Big Diomede Island.

Existing Conditions: Diomede Day School is the single most isolated school operated by the Bureau of Indian Affairs. The school building is situated near

the rocky beach on the only school site available in the village. The school is in serious structural condition. It is too old and too dilapidated for rehabilitation and unless a new facility is provided soon there will be no school at all for the village children. There are serious heating problems in the staff quarters. Replacement will pose a problem because there is such a short season when construction is possible and transportation is limited to one stop a year of the BIA ship North Star. Construction materials will have to go in on the North Star unless special arrangements are made for another carrier to go to Little Diomede.

Proposed Facilities: Facilities for a K-8 educational program for 35 pupils include two classrooms, a school kitchen, storage, a guest room, one set of quarters, a generator and heating unit, water and sewage treatment plants and electric distribution system.

Project Cost Estimate

Building Construction	$500,000
Utilities and site work	400,000
Equipment	(30,000)
Job supervision	60,000
Contingencies	40,000
Total	$1,000,000

Grey Hill High School (III), Arizona — $6,500,000

Location: Tuba City, Arizona approximately 75 miles north of Flagstaff, Arizona.

Existing Conditions: Construction of the first phase of the new Grey Hill School is complete. This facility provides modern, well-planned instructional space for about 750 students in grades 9-12 with 600 of this number in a boarding capacity. The first class of 9th graders has entered school this fall. The common use facilities for a completed school of 1,000 pupils are included in the present structure. As enrollment increases additional dorms and teaching spaces must be added. Although Grey Hill High School will draw students primarily from the Tuba City Agency, its enrollment will not be limited to Navajo children living near there. It will serve as a high school for those now having to attend secondary schools off the reservation.

This third phase of construction also provides 64 staff quarters since no rental housing is available in the Tuba City Area. This brings the total staff housing units up to 116.

Proposed Facilities: The proposal is to construct additional dormitory space for 400 pupils, additional classrooms, shops, swimming pool and landscaping to allow for an enrollment of 1,000 students. Sixty-four quarters and additional gym seating will also be included.

Project Cost Estimate

Buildings Construction	$5,782,000
Utilities and site work	248,000
Equipment	(660,000)
Job supervision	170,000
Contingencies	300,000
Total	$6,500,000

Navajo Community College, Arizona $1,000,000

Location: On the Navajo Reservation, Tsaile Lake, Arizona

Existing Conditions: Construction work for the college is well underway and is expected to be fully operational in about one year. Since fiscal year 1972 the Federal Government, through the Bureau of Indian Affairs has provided $5,500,000 towards the construction of the college facilities which when completed will provide space for 1,500 students. In fiscal year 1972, $500,000 was provided; in fiscal year 1973, $3,400,000 was provided; the President's Budget in fiscal year 1974 requested $1,600,000 for a total of $5,500,000. The purchasing power of this authorized funding level has been diminished because of the steady upward spiral of construction costs and it is now proposed to provide $1,000,000 additional to compensate for the inflation in construction costs. This will assist the Navajo Community College in completing the college buildings.

Project Cost Estimates:

Buildings and Utilities	$1,000,000

Haskell Indian Junior College (III), Kansas $2,850,000

Location: Lawrence, Kansas

Existing Conditions: The students attending Haskell represent a cross section of Indian youth from more than 30 states. The Haskell program of trade-technical and business training has been expanded to include college courses leading to a junior college degree., If Haskell is to continue to attract students there is an urgent need for new student residence halls. The present dorm facilities were not planned for college age young people and are at best minimum in terms of space and quality. The men's residence facilities under the football bleachers are in extremely poor condition. They should be closed as soon as possible. None of the home living units are adaptable for use by married students and there is an increasing number of married students interested in the Haskell program. The present home living units were built for high school students rather than for college age young people and at some future date will require extensive remodeling to convert them to college-type facilities.

Proposed Facilities: It is proposed to remodel existing facilities, and build modern college-type home living units for 260 men and women as the first portion of a program which will eventually provide college type facilites for 1,250 students. They will provide living and study space with the privacy and freedom that college students need. The dorm will include two person rooms, lounges and and other support spaces usually found in college dormitories. The $1,930,000 that was reprogrammed by the Appropriation Committee in F.Y. 1974 appropriation is part of this request.

In subsequent years, the balance of the rebuilding will be accomplished by constructing the remainder of the student housing, remodeling the existing academic school building, construction of a field house, fine arts building, warehouse and an administrative office building.

Project Cost Estimate

Building construction	$2,184,000
Utilities and site improvement	446,000
Equipment	(328,000)
Job supervision	100,000
Contingencies	120,000
Total	$2,850,000

Navajo Irrigation Building, New Mexico $1,000,000

Location: Farmington, New Mexico

Existing Conditions: The Navajo Indian Irrigation Project was authorized by the Act of June 3, 1962 (76 Stat. 96). Construction was started during Fiscal Year 1963.

At the present time the project's construction and planning offices are located in Farmington, New Mexico, in rented buildings.

Proposed Facilities: When the project is in operation, there will be a need for an administration office, a shop building for repair and maintenance of operating equipment, storage sheds and quarters for a watermaster, pump operator and ditch-rider.

The administration building will contain a vault, drafting rooms, conference rooms, two restrooms and twelve offices.

The location of these buildings will be south of Farmington, Sec. 21, which is central to the project's operations when it is completed.

Project Cost Estimate

Building Construction	$ 643,000
Utilities & Site improvement	242,000
Equipment	20,000
Job supervision	50,000
Contingencies	45,000
Total	$1,000,000

Kindergarten Classrooms and Quarters, Bureau-Wide $1,988,000

Location: The kindergarten units will be constructed at 16 locations throughout the United States.

Existing Conditions: The majority of Indian children who enter Bureau schools speak little or no English before they start school. This is a severe handicap and points out the need for a kindergarten experience for all Indian children. The nature and quality of learning experienced by the child at this age greatly influences his learning attitude and his success in later school endeavors.

Presently the Bureau operates an elementary school at all but one of the proposed locations. These funds are proposed to construct kindergartens for additional children at 16 locations and will allow for the continued expansion of the kindergarten program. The following table shows the proposed locations of the new facilities.

Location	No. Classrooms	No. Quarters
Alaska		
Stebbins	1	1
Kasigluk	1	1
Nunapitchuk	1	1
	3	3

Location	No. Classrooms	No. Quarters
New Mexico		
Isleta	1	0
	1	0
North Dakota		
Turtle Mountain	2	2
	2	2
South Dakota		
Eagle Butte	2	2
Manderson	1	1
Ft. Thompson	1	1
	4	4
Navajo (Arizona, Utah, N.M.)		
Leupp	1	1
Canoncito	1	1
Aneth	1	1
Dennehotso	1	1
Low Mountain	0	1
Toadlena	1	1
Sanostee	1	1
	6	7
Total	16	16

Project Planning and Design, Bureau-wide $720,000

The Congress directed the Bureau to request funds initially for project planning and design work and then request construction funds when all planning is completed. It is proposed to accomplish all planning and design work, drawings and specifications for the highest priority projects with these funds. It has been determined that each of the projects will be needed for the foreseeable future.

There are many advantages to be gained by completing the design work for projects before requesting construction funds. They include the opportunity to clear all obstructions from the path of a project in an orderly and timely manner. Also, more accurate cost estimates can be prepared when the working drawings are complete. In addition, the program can be developed and the spaces needed for implementation of the program can be provided after full and complete discussion by all concerned parties.

Following are the projects to be designed in fiscal year 1975:

	Design Cost	Preliminary Project Cost Estimate	
		Construction	Equipment
Lower Brule High School, S.D.	$100,000	$ 1,926,000	$ 172,000
Salt River Elem. School, Ariz.	140,000	2,140,000	471,000
Kyle High School, S.D.	198,000	3,017,400	494,000
Allen Elem. School, S.D.	150,000	2,568,000	310,000
Chitamacha School, La.	72,000	963,000	107,000
Ahfachkee School, Fla.	60,000	802,500	27,000
Total	720,000	11,416,900	1,581,000

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Design Drawings for the Future Construction of
Lower Brule High School, South Dakota $100,000

Location: On the Lower Brule Reservation about 90 miles south of Pierre and 35 miles from Chamberlain, South Dakota.

Existing Conditions: Population on the Lower Brule Reservation has increased 7% per year during the past 5 years due to an increase in available jobs and housing. The dropout rate of high school students has also decreased from 25% in 1971 to 7% since temporary facilities have been erected at Lower Brule for their program. Prior to this time the high school students attended various public schools. The construction of the Lower Brule Boys Ranch will add another 30 students by 1974. Another 10 students have moved in with BIA Agency personnel due to the division of the Pierre Agency into two separate agencies, one of which is located at Lower Brule. High school enrollment was twice the expected number of students and reached 145 by the end of 1972. The existing temporary facilities are crowded and inadequate and the campus is muddy and unimproved. Facilities for industrial arts, library and media center, storage and physical education are lacking making it difficult to carry on a minimum program. The present temporary buildings that will be abandoned when a new facility is built are needed for a day care center, adult education and other community programs.

Proposed Facilities: A completely new high school plant for 175 students will include general classroom space, science, home economics, industrial arts, art, music, and physical education facilities. Support facilities will include cafeteria, learning resource center, plant management shop and staff housing.

Project Cost Estimate

Building Construction	$1,350,000
Utilities and Site Improvement	450,000
Equipment	(172,000)
Job Supervision	36,000
Contingencies	90,000
Total	1,926,000

Planning and Design for the Future Construction of
Salt River Elementary School, Arizona $140,000

Location: On the outskirts of Scottsdale, Arizona.

Existing Conditions: The present program at Salt River begins with kindergarten and goes through the sixth grade. Facilities are old and the buildings are hard to maintain. They are crowded and poorly designed so that good educational programs are difficult to operate. The projected K-8 enrollment is 400 pupils.

Proposed Facilities: It is proposed to plan and design a completely new K-8 facility for 400 pupils to replace the present school. The new facility will expand the present one by including instructional space for grade 8. Special use spaces for science, home economics, exploratory shops, physical education, art and music will be included along with support facilities such as a

learning resource center, plant management shop, cafeteria and administration space.

Project Cost Estimate

Building construction	$1,680,000
Utilities and site improvement	320,000
Equipment	(471,000)
Job supervision	40,000
Contingencies	100,000
Total	2,140,000

Planning and Design for the Future Construction of Kyle High School, South Dakota — $198,000

Location: On the Pine Ridge Reservation approximately 20 miles north of Wounded Knee, South Dakota.

Existing Conditions: The present K-12 facility was built for elementary pupils but because of the need and demand the high school grades were added. This has over-crowded the school plant. Even with the addition of temporary classroom facilities for secondary students the plant is very inadequate. The auditorium has been divided into three classrooms so that it cannot be used for assemblies and programs. Madeshift classrooms for shop, art and science have been located in the basement of the old school and provide poor instructional space. The science lab does not even have water in the room. Home economics space is located in one small room. The small gymnasium must be used for dining space and this restricts its use for athletics and physical education. The library and media center have lost space to the high school business department and other classrooms needed for the academic program. Office space is also inadequate.

Proposed Facilities: The proposal is to construct a 300 student secondary school. This will allow the elementary grades to expand into the facilities originally provided for them. The proposed plant will include classroom or general instructional space, science, art, music, home economics, industrial arts and business laboratories, gymnasium, learning resource center, administrative space and the maintenance facilities required to take care of the school plant. Twenty staff quarters will also be included.

Project Cost Estimate

Building construction	$2,400,000
Utilities and site improvement	420,000
Equipment	(494,000)
Job supervision	56,400
Contingencies	141,000
Total	3,017,400

Design for the Future Construction of Allen Day School — $150,000

Location: 23 miles northwest of Martin, South Dakota and 110 miles east of Rapid City.

Existing Conditions: The school plant at Allen is 37 years old with the exception of a classroom and multipurpose room which was added in 1958. The

old wooden structure is crowded and difficult to maintain. It has only two small offices and the small auditorium has been turned into a library. The art and some physical education classes are held in the basement rooms. The four classrooms will be inadequate to provide for the anticipated enrollment level of 300 students. The multipurpose room is very small and its use for lunch makes the scheduling of physical education classes difficult. Kindergarten and special education facilities are not included in the present building. The people in the community want their children to attend school at the home community through the ninth grade.

Proposed Facilities: The proposal is to replace the present facility with a new K-9 building for 300 pupils. The facility includes instructional space for pre-school, primary, intermediate and junior high school divisions, science, shop, home economics, music and art labs, gymnasium, learning resource center, kitchen/dining space and an administrative unit. A Plant Management shop, fifteen units of staff housing and landscaping will be included also.

Project Cost Estimate

Building construction	$2,200,000
Utilities and site improvement	200,000
Equipment	(310,000)
Job supervision	48,000
Contingencies	120,000
Total	2,568,000

Design Drawings for the Future Construction of Chitimacha Day School, Charenton, Louisiana $72,000

Location: Charenton, Louisiana approximately 100 miles west of New Orleans and 5 miles northeast of Baldwin, Louisiana.

Existing Conditions: The small classroom and kitchen building (2,474 Sq. Ft.) was condemned for use by the local public school board nearly 40 years ago. It was given to the Bureau of Indian Affairs in 1935 to use as a school for the Chitimacha Tribe. Although repairs have been made the building is in extremely poor condition and inadequate for a modern educational program. A toilet building was added in 1950 and a temporary classroom was erected in 1972. The entire facility is either obsolete or inadequate for the children it serves.

Proposed Facilities: The projected enrollment for the K-9 program at Chitimacha is 75 pupils by 1975. A completely new school facility will replace the present structure and provide classrooms, learning resource center, special use spaces for science, art, music, exploratory shop, home economics, physical education and cafeteria. Building 901 (kitchen and classrooms) and 902 (toilet building) will be demolished and the temporary classroom will be converted to employee quarters.

Project Cost Estimate

Building construction	$694,000
Utilities and site improvement	206,000
Equipment	(107,000)
Job Supervision	18,000
Contingencies	45,000
Total	963,000

Planning and Design Drawings for the Future Construction of an Addition to Ahfachkee School, Florida — $60,000

Location: 45 miles from Clewiston, Florida on the Seminole Reservation approximately 80 miles northwest of Hollywood.

Existing Conditions: The present facility is crowded and has no multipurpose room. One of the classrooms has already been divided to make a room for the kindergarten children. The children must eat lunch in their classrooms because no dining space is available. More office and storage space is badly needed. The teachers must also commute over 40 miles one way because staff quarters are not available at the school. The present enrollment of about 44 pupils will increase to 70 in the next year or so. The physical education program suffers in rainy weather because there is no facility to handle it.

Proposed Facilities: The proposal is to construct two additional classrooms, a multipurpose room, kitchen-dining room, and two-3 bedroom staff quarters. This will allow students to attend school nearer home and provide the support facilities so badly needed.

Project Cost Estimate

Building construction	$563,750
Utilities and site improvement	186,250
Equipment	(27,000)
Job supervision	15,000
Contingencies	37,500
Total	802,500

Water Exploration and Development, Bureau-wide — $100,000

One of the most essential factors in planning schools and other facilities is the determination of the adequate supply of potable water. This is imperative in the arid region of the country, in Alaska where water development is relatively new and in other parts of the country at locations of Bureau facilities. It is proposed to drill exploratory wells, perform testing and develop the wells at the following locations in Fiscal Year 1975.

Project Location	Estimated Cost
Big Coulee School, So. Dak.	$ 20,000
Pine Ridge, So. Dak.	25,000
Allen Day School, So. Dak.	20,000
Red Lake School, Arizona	25,000
Colville Agency, Washington	10,000
Total	100,000

Deferred Equipment, Bureau-wide $2,895,000

In prior years funds have been appropriated by Congress for the construction of certain schools; however, funds for the purchase of equipment were not appropriated at that time. In order for the new plants to be operational the equipment items must be provided. It is proposed to purchase such equipment as desks, chairs, tables, cabinets, maps, beds, lockers, mattresses, linens, buffers, waxers, pots, pans, and other classroom, dormitory, and kitchen equipment for the following schools:

Project Location	Estimated Cost
Casa Blanca, Elementary School, Arizona	$ 217,400
Ramah School, New Mexico	395,000
Acoma School, New Mexico	426,200
Wanblee School, South Dakota	591,900
Kindergartens (Bureau-wide)	383,000
Dorm Replacement (4 locations)	400,000
Chevak School, Alaska	178,600
Hooper Bay School, Alaska	136,900
Alakanuk I School, Alaska	166,000
Total	2,895,000

Technical Assistance and Services $3,500,000

Staff and related expenses to provide the architectural, engineering and related technical services required for the design and construction of new facilities and the major rehabilitation of existing buildings and utilities required to complete Bureau buildings and utility systems. Also, to provide planning, design and construction advice to Indian tribes and Alaska Native organizations as requested by them.

Major Alterations and Improvements Bureau-wide $5,800,000

Each year the average age of Bureau facilities increases with attendant demands for renovations as facilities become functionally obsolete. An additional burden to the program is the requirement for compliance with the Construction Safety Act of 1969 and the Occupational Safety and Health Act of 1970. Until new construction replaces the majority of existing facilities, the demands for major alteration and improvement projects will increase.

The estimate of $5,800,000 will provide for the continued elimination of unsafe and unsanitary conditions existing in Bureau plant facilities (including water and air pollution control projects); for correction of functional deficiencies; and for the modernization of existing facilities including the replacement of obsolete and deteriorated buildings and facilities which because of their relatively small size are not applicable for inclusion in the regular construction program. A high priority will be assigned to the correction of unsafe and unsanitary conditions with primary emphasis given to conditions existing in school and dormitory facilities.

2. IRRIGATION SYSTEMS $24,522,000

The budget estimate of $24,522,000 will provide a program of $17,200,000 for the Navajo Indian irrigation project being constructed by the Bureau of Reclamation and a program of $7,322,000 for the Bureau of Indian Affairs for the improvement, rehabilitation, betterment, and extension of Indian irrigation projects and related power systems.

On many Indian reservations, irrigated farming is the basic economic industry and in some areas the only industry available to the Indians. On these reservations where land and water are the primary and basic resources, early and full development for irrigated farming is necessary and urgent if the Indians are to realize any benefits from such resources. Moreover, because of the acute competition for water on and adjacent to Indian reservations, particularly in the arid and semi-arid west, there is greater danger of the loss of water to the Indians unless these water supplies are put to beneficial use. On many of the Indian reservations the use of water for irrigation is presently the highest and best use. There is an immediate need for water, and plans and programs for the development of this water have already been made. However, if in the future it should be determined that there is a higher and better use for the irrigation water, such water may be diverted for these purposes. In the meantime, however, the water should be developed and used for Indians in order to preserve the water for the ultimate economic development of the reservation.

It is proposed to develop as quickly as possible water supplies and distribution systems needed to irrigate all acreages of Indian lands that are susceptible to being economically irrigated. This involved the construction of new and authorized irrigation systems and the extension and/or rehabilitation of existing irrigation systems in order that all irrigable Indian lands which are feasible for irrigated farming can be developed to their ultimate productive capacity. By so doing, this program will provide a means by which the Indians can put to beneficial use much of their valuable water which now is flowing off the reservation and is being presently used or planned for use by off-reservation development.

Irrigated farming is a means of providing a better standard of living for resident reservation Indians and is oftentimes the only means available to the local Indians for improving their economic standard.

There are three irrigation projects that have related power systems which furnish power for the respective irrigation projects and Indian reservations. On these Indian reservations where the generation and/or transmission and distribution of power are an integral part of the irrigation project, such power systems are not only serving the primary purpose of furnishing electrical energy for project purposes but are authorized to furnish power to residents of the reservation as well as to local industrial and commercial enterprises on or adjacent to the reservation. Because of the dependency the consumers have upon these power systems and the contractual obligations, the Bureau has the responsibility to furnish a firm, adequate, and dependable power supply. To meet these obligations, as well as new power demands of the constantly growing number of customers, requires that the system be continuously improved, upgraded, and extended as any other such utility.

The irrigation construction program for fiscal year 1975 provides for the continuation of the construction, extension, rehabilitation, and betterment of irrigation and power facilities on certain listed irrigation projects and power systems. The program also provides for the continuation of the preparation of engineering and economic feasibility reports for existing and proposed projects for which such reports have not been completed.

The largest single irrigation construction program is the development of the Navajo Indian irrigation project, as authorized by Congress in 1962 and embracing 110,630 acres.

SUMMARY OF PROJECTS

	Total Estimated Cost	1975 Estimate	Justification
(a) Annual Contract Payments			
Fort Belknap.....	$250,000	$7,404	For payment of the 33rd fixed annual contract installment due the Bureau of Reclamation for storage in Fresno Dam (No. 1-1-Ind-18725) 8-16-46.
Tongue River.....	360,750	9,750	For payment of the 35th fixed annual contract installment due the Tongue River Water Users Assoc., for storage in the Tongue River Storage Reservoir (Act of 8-11-39; 53 Stat. 1411).
(b) Irrigation Construction and Rehabilitation			
Arizona			
Colorado River			
Irrigation.....	35,382,000	1,035,000	See detailed justification
Power.....	---	725,000	See detailed justification
Cocopah.....	---	73,000	See detailed justification
Pima Agency			
San Carlos Project			
Indian Works.....	---	110,000	See detailed justification
San Carlos Project			
Irrig. Joint Works..	31,000,000	509,000	See detailed justification
Power.....	---	287,000	See detailed justification
Vaiva Vo.....	1,414,000	440,000	See detailed justification
Salt River.....	---	190,000	See detailed justification
California			
Pala.....	596,000	30,000	For drilling an additional well to increase the water supply.
Rincon.....	504,000	30,000	For drilling an additional well to increase the water supply.

	Total Estimated Cost	1975 Estimate	Justification
California (con.)			
Hoopa.....	---	$20,000	For rehabilitation of distribution system which has been damaged by flood and is in deteriorating condition.
Idaho			
Michaud Project (Fort Hall).....	$8,820,000	222,000	See detailed justification
Montana			
Blackfeet.....	---	100,000	See detailed justification
Crow.....	2,618,800	143,000	See detailed justification
Fort Peck.....	3,788,300	218,000	See detailed justification
Fort Belknap.....	---	43,000	For rehabilitation of deteriorated distribution system.
Flathead Project Power.....	---	235,000	See detailed justification
Nevada			
Duck Valley.....	7,928,000	196,000	See detailed justification
Fallon.....	1,179,000	175,000	See detailed justification
Pyramid Lake.....	---	175,000	See detailed justification
Walker River.....	1,080,000	150,000	See detailed justification
New Mexico			
Navajo-Hogback.....	---	318,000	See detailed justification
Navajo Project.....	249,500,000	17,200,000	See detailed justification
Northern Pueblos.....	7,260,000	81,000	See detailed justification
Southern Pueblos.....	---	104,000	See detailed justification
Southern Ute.....	---	10,000	Construct 25 miles of farm laterals.
Zuni Pueblo.....	---	77,000	See detailed justification
Utah			
Uintah and Ouray.....	---	110,000	See detailed justification

	Total Estimated Cost	1975 Estimate	Justification
Wyoming			
Wind River.....	$5,424,000	$45,000	For purchase of construction equipment and initiation of rehabilitation program.
(c) Surveys, Investigations and Plans.....	---	608,000	See detailed justification
(d) Engineering and Supervision.....	---	845,846	See detailed justification
Total Estimate.....		24,522,000	

(b) Irrigation Construction and Rehabilitation, $23,051,000. The irrigation and power projects for which funds in excess of $50,000 have been requested and for which detailed justifications have been prepared are as follows:

Arizona

COLORADO RIVER PROJECT, $1,760,000. The funds requested provide $1,035,000 for irrigation construction and $725,000 for construction and rehabilitation of the related power systems.

Irrigation Construction, $1,035,000. The Colorado River irrigation project is one of the largest and potentially the most productive of the irrigation projects under the Bureau of Indian Affairs. Adequate water for the project's potentially irrigable area of 105,000 acres was assured in the decree issued by the Supreme Court in the case of Arizona vs. California. Extension of the project lateral system is essential if the Colorado River Indian people are to realize the income potential of the reservation area for which they have decreed water. The Colorado River Tribe desperately needs this program to continue its progress toward economic self-sufficiency. The entire economy of the reservation, except for relatively minor recreational development, is based on the agricultural business complex growing from the direct use of the water-right resource. This growth with accompanying cash income and job opportunities has been significant. Of the Indian people employed on the reservation, approximately 59 percent are working on jobs related to agriculture and its development.

Construction - Colorado River Irrigation Project:

Concrete lining of 6.3 miles of Lateral 90 from Tsosie Road to Main Drain.....		$690,000
Extend Lateral 90 for 2.5 miles.....		295,000
(1) Earthwork and right-of-way on Lateral 90 from Main Drain to Tyson Wash.....	$145,000	
(2) Road crossing.....	70,000	
(3) Water control structures.....	80,000	
Drill and equip two drain wells to relieve serious drainage condition in old Dixie Ranch area of the project.....		50,000
Total.....		1,035,000

Power System Construction and Rehabilitation, $725,000. The power system of the Colorado River Indian irrigation project serves 2,189 customers which number includes commercial, agriculture, and government customers. The power demand brought on by irrigation development on the reservation and by recreation, home-site, and industrial development has increased steadily at the rate of about 16 percent per year. During the last five years the active customer accounts have more than doubled. With this continuing load growth sections of the system have reached or exceeded their capacity, causing voltage drops which adversely affect customer service. The deficiencies were grought out in the 1967 power system study and report by R. W. Beck and Associates. The Beck report is being used as a guide for reorganizing, rehabilitating, upgrading, and extending the power system to keep pace with the growing economy in the area.

The proposed program for fiscal year 1975 will permit the continuation of work relieving the existing overload and will provide capacity needed to serve power customers adequately. The planned construction will promote the growth and success of enterprises which will benefit the Colorado River Indian Tribe. All funds advanced under this request will be repaid from power revenues collected from the sale of electrical energy. All funds appropriated prior to the 1965 fiscal year were repaid to the United States Treasury as of June 30, 1965.

The proposed work for the power system for the fiscal year 1975 is as follows:

Construction - Colorado River Power Project:		
Construct short line extensions to existing distribution system. For construction of new customer short extension from existing distribution facilities. System growth at a rate of 300 new customers annually is projected.....		$200,000
Construct 69 KV - 12.5 KV substation at Big River Subdivision and 8 miles of trans-mission line.....		200,000
Substation.....	$70,000	
Transmission.....	130,000	
Rearm and reinsulate 12 miles of distri-bution system in Big River Subdivision for 12.5 KV distribution.....		100,000
Construct a second 20,000 KVA 161-69 34.5 KV transformer and associated equipment at Headgate Rock Substation.....		225,000
Transformer cost.....	$150,000	
Other associated equipment...	75,000	
Total.....		725,000

COCOPAH PROJECT, $73,000. The only natural resource owned by the Cocopah Tribe is a 528-acre land base. While this land lies within one of the most productive agricultural areas in the United States, there has never been a funding program available to develop these acres to their optimum production capability.

Of the 528 total acres, only 116 are considered to be properly developed and returning a fair market rental value to the tribe. An additional 128.47 acres are under lease but bring only a fraction of their true value.

The proposed funding would complete development on the 128.47 acres and incorporate, by subjugation, an additional 80 acres now in raw, brush covered condition.

The features of work proposed for fiscal year 1975 are as follows:

Rehabilitate irrigation facilities and land development of 128.47 acres.....	$34,000
Construct irrigation facilities and perform land development for 80 acres.....	39,000
Total.....	73,000

SAN CARLOS IRRIGATION PROJECT, $906,000. The funds requested provide for $110,000 rehabilitation of irrigation facilities on the Indian portion of the project and certain preconstruction activities, $509,000 for construction and rehabilitation of facilities of the joint works and $287,000 for power system construction and rehabilitation.

The San Carlos irrigation project was authorized by the Act of June 7, 1924, and is designed to irrigate 100,546 acres of land of which 50,546 acres are on the Gila River Indian Reservation and 50,000 acres within the non-Indian San Carlos Irrigation and Drainage District. All of the non-Indian lands and 41,000 acres of the Indian land have been prepared for irrigated farming.

Irrigation Rehabilitation and Construction - Indian Works, $110,000. The funds requested for fiscal year 1975 will be used to rehabilitate the following irrigation facilities serving the Indian lands of the Gila River Indian Reservation:

Replacement of 100 inadequate crossings and turnout gates at $200 each.....	$20,000
2.5 miles of 42-inch concrete lined ditch to PD-3..	30,000
8 miles of 28-inch concrete lined ditch.....	60,000
Total.....	110,000

Irrigation Construction and Rehabilitation, $509,000. The flow of the Gila River is very erratic causing the project water supply to be unreliable. More than 120 wells have been drilled to supplement the river supply. In some years not more than 50 percent of the land can be farmed because of water shortages. Continuing severe drought conditions on the watershed of the Gila River have increased the need for pumping. The result has been a steadily declining groundwater table causing numerous wells to fail. New wells must be drilled to replace those that have failed and others must be deepened as the water table falls. Deepening requires additional well casing, column pipe assembly, larger electric meters, transformers, and protective equipment.

The irrigation construction work proposed for fiscal year 1975 is as follows:

The drilling and equipping of 7 new wells.....	$325,000
Rehabilitation of 8 irrigation wells.....	184,000
Total.....	509,000

Power System Construction and Rehabilitation, $287,000. The power system was designed and constructed primarily for pumping purposes. It now serves more than 5,800 customers and distributes more than 150,000,000 kilowatt hours of electric energy per annum. The system consists of two generating plants, 180 miles of high voltage transmission lines, 800 miles of distribution lines, and 22 substations.

Distribution line extensions are continually being required to provide service to new customers in the project area. These new customers include residential, commercial, agricultural, and industrial accounts.

The power construction work proposed for fiscal year 1975 is as follows:

Line extensions to new customers, build distribution lines, purchase transformers, conductor and metering equipment	$152,000
Rebuild Collidge Dam Substation	135,000
Total	287,000

VAIVO VO IRRIGATION PROJECT, $440,000. This project is a feature of the Santa Rosa Wash Multiple-Purpose Project, Papago Indian Reservation, Arizona, authorized by the Flood Control Act of October 27, 1965 (79 Stat. 1073).

The construction by the Corps of Engineers of the Tat-Momolikot Dam and St. Clair Reservoir on the Santa Rosa Wash will control, regulate, and store floodflows originating on 1,750 square miles of watershed of the Santa Rosa, Jackrabbit, and Kohatk Washes, which have their confluence immediately above the damsite.

The Bureau of Indian Affairs is responsible for the construction of the Vaivo Vo irrigation project which is estimated to cost $1,414,000 (based on 1962 prices). The project will provide facilities for use of the stored waters for the irrigation of 1,640 acres of land within the Papago Indian Reservation. The work of this Bureau is being coordinated with the work of the Corps of Engineers. Work began on both the Santa Rosa Project and Vaivo Vo Project in fiscal year 1974.

The funds proposed for fiscal year 1975 will be used to continue the construction of the Vaivo Vo Project.

SALT RIVER PROJECT, $190,000. This project is located on the Salt River near Phoenix, Arizona, and has 9,300 acres of assessable irrigated land.

The features of work proposed for fiscal year 1975 are as follows:

Drill and equip two deep wells	$100,000
Line 1/2 mile of main canal	50,000
Rehabilitate and deepen two wells	30,000
Replace or repair 10 irrigation structures	10,000
Total	190,000

Idaho

MICHAUD UNIT, $222,000. This project was authorized under the Act of August 31, 1954 (68 Stat. 1026). The construction was started in the fiscal year 1957 with an appropriation of $500,000 and has continued each year since as funds were

made available. This unit of the Fort Hall project will irrigate 21,000 acres of excellent land (20,195 acres Indian owned and 805 acres non-Indian owned) lying between the cities of Pocatello and American Falls. The water supply for the unit is derived from stored water in American Falls and Palisades Reservoirs constructed by the Bureau of Reclamation. However, the water actually used is pumped from the Portneuf River in exchange for the stored water. A series of wells will also provide underground water to supplement the water pumped from the river.

The proposed work for the fiscal year 1975 is the drilling of 10 deep wells.

Montana

BLACKFEET PROJECT, $100,000. The Two Medicine Canal services approximately 28,000 acres in the Two Medicine unit of the project. In order to supply sufficient water, the capacity of the canal must be maintained at 500 cubic feet per second (cfs) of water. At the present time, because of restrictions in the canal, the capacity is below the amount required. The funds will be used to continue the enlargement of the canal to the required capacity.

CROW, $143,000. The Crow irrigation project consists of seven irrigation units. Three of the units have working agreements with private ditch and drainage districts or associations. Construction work authorized under the Act of June 28, 1946 (60 Stat. 333) is included in the conditions set forth in current contracts with the three irrigation districts. The work proposed for the fiscal year 1975 is the continuation of rehabilitation work and extension of the distribution systems serving these units prior to the takeover of the operation and maintenance programs of these units by the districts involved. The work includes the rehabilitation of diversion dams, canals, laterals, and structures.

FORT PECK PROJECT, $218,000. This project is located in northeastern Montana and was authorized by the Act of May 20, 1908 (35 Stat. 558). Construction was started in 1909 and continued as funds were made available and the need for additional farm land arose. The project originally consisted of five separated irrigation units. Three units are no longer in operations. The two operating units, which embrace an ultimate irrigable area of 24,623 acres, are the Wiota (Big Porcupine) Unit and the Frazer-Wolf Point Unit. Of the ultimate irrigable area, 24,623 acres, facilities have been constructed to serve 15,520 acres.

The basic industry on the reservation is livestock production. In order to meet the demand for winter feed there is an urgent need to extend irrigation facilities to certain of the lands not now irrigated and to rebuild and replace deteriorated irrigation facilities to certain of the other lands not now irrigated because of the need for rehabilitation.

The construction and rehabilitation work for this project is nearing completion. The program for the fiscal year 1975 is as follows:

Construction of 10.0 Miles of laterals and 25 structures	$100,000
Construction of 3.0 miles of drain	9,000
Construction of Relift station	16,000
Right of Way for Revetments	5,000
Purchase of truck and construction of oil house	43,000
O & M During Construction	10,000

Rehabilitation of 5.0 miles of lateral and replacement of 20 structures	$35,000
Total	218,000

FLATHEAD POWER PROJECT, $235,000. The power system on the Flathead Indian Reservation is now serving approximately 7,900 customers. The expansion of the Flathead Lake and Arlee areas are adding over 150 accounts per year. In order to meet this load growth, it will be necessary to increase Kerr substation capacity by the installation of a 15-MVA transformer as well as increase the number and size of distribution transformers. Consequently, the above funds will be used as follows:

New Ravalli-Arlee 34.5 KV transmission line with 12.5 KV distribution underbuild	$110,000
New 34.5/12.5 KV substation near Arlee	75,000
Extension and enlargement of 3-phase feeders	50,000
Total	235,000

Nevada

DUCK VALLEY PROJECT, $196,000. The Duck Valley irrigation project is within the Duck Valley Indian Reservation, which is located on the Nevada-Idaho State line with portions of the reservation lying in both States. This region is primarily a stock-raising country where the irrigated base properties are used to produce forage crops for winter livestock feed. Since about 1874 these hay crops have been the most important crop produced and there is every indication that hay production will continue to play a very important role in the economy of the reservation.

The project embraces 12,000 acres of which 11,045 acres are irrigated, in production, and are totally used by tribal members. Of the irrigated land, 4,100 acres have been developed to modern high standards of land development, and in addition 640 acres will be developed under the 1974 fiscal year program. Much of the unimproved irrigated land is still irrigated by sloughs and meandering small ditches used back in the days when the irrigation water sources were from natural flooding of the Owhee River. The main and firm source of water is from the normal flow of the East Fork of the Owhee River and from storage at Wildhorse Dam. These two sources will provide an adequate supply of water for the 12,000 acres when fully developed.

The features of work proposed for fiscal year 1975 are as follows:

Construct 10 miles of canals and laterals with necessary structures	$92,000
Clearing and leveling 104 acres, construction of farm ditches, and establishment of first crop	104,000
Total	196,000

FALLON INDIAN IRRIGATION PROJECT, $175,000. The Fallon project is encompassed by the Newlands irrigation project within the Truckee-Carson irrigation district boundaries. The formation of the Fallon Indian Reservation was based upon the August 5, 1906, Agreement that Indians holding 160-acre allotments in the Carson Sinks area without water rights could exchange their lands for 10-acre allotments with a paid-up water right.

The present reservation consists of 5,480 acres of which 4,877.3 acres have a water right. Only 3,025 acres are presently irrigated. The remaining land has been declared non-irrigable. Senate Bill 1222, introduced on March 14, 1973, requested 2,640 acres of the Public Domain to be added to the reservation. This would add sufficient good quality arable land to enable the Indians to utilize their full water right.

The funds proposed for fiscal year 1975 would continue the rehabilitation of the project.

PYRAMID LAKE, $175,000. The Pyramid Lake irrigation project has an ultimate acreage of 5,963 acres of which 970 acres are presently in production and assessed. Irrigation facilities serving these lands include Numana Diversion Dam, a loose rock diversion dam, 15 miles of canals, 7 miles of laterals, and 141 water control structures.

The irrigated lands are farmed by Indians and are divided into assignments ranging in size from 2 to 83 acres with the average being about 16 acres. The overall development program provides for approximately 26 land units on the bottomlands. Each unit will provide for 100-head cattle operation. Full utilization of the rangeland will be attained when the cattle count reaches 2,600 head. This minimum land use unit meets the general needs as recommended by the University of Nevada, Fulcher's Economic Report, and the Nevada Indian Agency.

The proposed program for fiscal year 1975 will construct 10 miles of canals and laterals with necessary water control structures.

WALKER RIVER, $150,000. The Walker River irrigation project is located along the north end of Walker Lake in Mineral County, Nevada, and has an ultimate irrigable area of 4,000 acres, of which 2,750 are presently being served. The acres now being served include 200 acres of non-Indian owned land and 2,550 acres of Indian owned and operated land. The water supply is obtained from the natural flow of the Walker River and from storage in Weber Reservoir.

The distribution system serving the project was constructed in the early 1900's and is badly in need of major repairs.

At the present time some 81 Indian families of the resident population of approximately 500 individuals are engaged in agriculture, deriving all or part of their income from crops and livestock production.

The construction and rehabilitation program provides for the rehabilitation and improvement of the irrigation system now serving 2,750 acres and the extension of facilities to serve an additional 1,250 acres.

The work proposed for fiscal year 1975 under this request is to rehabilitate 22 miles of existing canals and laterals.

New Mexico

HOGBACK PROJECT, $318,000. This project embracing 9,614 acres is the largest and most important of the existing projects or units on the Navajo Reservation. A dependable water supply is obtained from the San Juan River. When this project is fully developed it will provide 250 farm units and support approximately 2,000 Navajo Indian people.

The Act of July 12, 1960 (74 Stat. 470) authorized the Secretary of the Interior to transfer all irrigation units on the Navajo Reservation to the Navajo Tribe. Under an agreement made pursuant to this Act by and between the Secretary of the Interior and the Navajo Tribe, the tribe accepted the responsibility for operation and maintenance of all completed portions of the Hogback unit. This unit should be completed at the earliest possible time in accordance with the agreement.

The work proposed for the fiscal year 1975 is the continuation of the concrete lining of the Hogback main canal for a distance of 4.1 miles.

20-359 O - 74 - 44

REGION SOUTHWEST

PROJECT DATA SHEET

PF-65 (12-68)
Bureau of Reclamation

Project and State	Completion Date	% Complete	Date
NAVAJO INDIAN IRRIGATION PROJECT, NEW MEXICO - BIA	After F.Y. 1980	26 1/	1-1-74

AUTHORIZATION Public Law 87-483, June 13, 1962, Amended September 25, 1970
Public Law 91-416

B/C RATIO 1.50 Date 1966

LAND CERTIFICATION
None required

DEFINITE PLAN REPORT
None required

SUMMARIZED FINANCIAL DATA

Total Federal Obligations (Reclamation)	$	Allotments to June 30, 1973	$ 57,198,385
Total Federal Obligations (Other)	247,780,000	Allotments for F.Y. 1974	14,000,000
Net Property and Other Transfers	2,346,000	Allotments to Date	71,198,385
Cash Advances--Non-Federal	220,000		
Adjustment (Reimbursement) 2/	-846,000	Allotments Required for F.Y. 1975	17,200,000
Total to be Allocated	$ 249,500,000	Balance to Complete after F.Y. 1975	$ 159,381,615

ALLOCATIONS		REPAYMENT		AMOUNTS PER ACRE	
Irrigation	$ 249,500,000 3/	Amount Repaid by Irrigators	$	Irrig. Invest. per Acre	$
Power	.....	Amount Repaid by Power		Repayment of Investment per Acre:	Payment Capacity per Acre $
M & I Water	.....	Amount Repaid by M & I Water		By Irrigators $	Annual Charges:
Recreation	.....			By Power Revenues	O & M $
F & WL	.....			By M & I Water Users	Construction
Flood Control	.....				
Other	.....	Nonreimbursable	249,500,000		
Total	$ 249,500,000	Total	$ 249,500,000		Total $

STATUS OF REPAYMENT CONTRACT A form of contract between the United States, represented by the Bureau of Indian Affairs and the Bureau of Reclamation, and the Navajo Tribe of Indians which provides for deferring the collection of construction costs so long as the benefitted lands are in Indian ownership is under study.

DESCRIPTION This project is located in Rio Arriba and San Juan Counties in northwestern New Mexico. The project plan of development provides for placing a total of 110,630 acres under irrigation. The project plan will provide a livelihood for an estimated 6,550 Navajo families as farm operators, custom laborers and employees in related service activities, thus providing a higher standard of living for more than 33,000 Navajo Indians. The project also will provide a power supply of 23,000 kilowatts, primarily for operation of the project's pumping facilities. Included in the total cost is $9,298 for 510 acres of lands for right-of-way at an average cost of $18 per acre. Approximately 52 percent has been acquired. Included in the total cost is $390,000 for acquisition of 14,075 acres of privately-owned patented lands susceptible to irrigation lying adjacent to the Navajo Indian Reservation to increase the project area at an average cost of approximately $28 per acre; of which 80 percent has been acquired. Approximately 16 percent of the relocation work has been accomplished. The project lands are presently capable of providing only very poor grazing for livestock. When adapted to irrigation, they will be well suited for producing small grains, hay forage crops, vegetables and fruits.

PROJECT DATA SHEET--2
Navajo Indian Irrigation Project, New Mexico

Footnotes:

1/ Reduction in percent complete due to increase in total estimated obligations.

2/ Represents construction of roads and bridges funded from the road construction appropriation.

3/ Change in allocations and repayment from 1974 Budget Justifications:

	1974 Estimate	1975 Estimate
Irrigation.....	$207,500,000	$249,500,000

The estimate was increased $42 million for indexing prices.

NAVAJO INDIAN IRRIGATION PROJECT, $17,290,000 1/

Work Proposed, FY 1975

Pumping Plants, $10,000. Provides for collection of field design data.

Canals, $13,535,000. Construction of Main Canal Mi. 20.2 - 20.9 and Mi. 26.4 - 32.8, consisting of Armenta, Kutz, West Kutz and Horn Siphons, Highway 44 Tunnel and open concrete lined canal will be completed. Construction will continue on another 14.5 miles of Main Canal Mi. 20.9 - 26.4 and Mi. 32.8 - 41.8, consisting of Tunnel No. 4 and approximately 13.5 miles of open concrete lined canal, which will reach the first block of lands to be irrigated. This construction includes pumping plant structures, a service road and Mi. 41.6 intercepting drain. A contract awarded in fiscal year 1974 for furnishing and installing the natural gas prime movers and pumps in the pumping plant structures to provide irrigation to Block 1 lands will continue. Construction will be started on the last 4.5 mile section of the Main Canal, Mi. 41.8 - 46.3, which includes Gallegos East and West Fort Siphons, open concrete lined canal and control checks. Construction will also be started on the Gravity Main Canal, Mi. 0.0 -14.5. Various contracts for relocation, removal, rearrangement, and alteration of oil and natural gas pipelines and appurtenant facilities and utility lines crossing canal right-of-way will also be executed. Collection of field design data and preparation of designs and specifications of the Amarillo Canal will continue.

Laterals, $1,890,000. Construction will continue on the distribution systems where initial water is scheduled to be available in the spring of 1976. Various contracts for relocation, removal, rearrangement and alteration of oil and natural gas pipelines and appurtenant facilities crossing lateral right-of-way will also be executed. Collection of field design data and preparation of designs and specifications for ensuing contracts for construction of lateral distribution systems for serving succeeding blocks of lands will continue.

Drains, $980,000. Construction will continue on the collector drains. Also, various contracts for relocation, removal, rearrangement and alteration of oil and natural gas pipelines and appurtenant facilities crossing drain right-of-way will be executed. Collection of field design and preparation of design data and preparation of designs and specifications will continue.

Navajo Dam Powerplant, $600,000. The electric power requirements for operation of the project pumping facilities will be fulfilled in part by a 23,000 kW hydroelectric powerplant at Navajo Dam. In order to have power available to meet pumping power requirements for irrigation of project lands lying above the Main Canal, scheduled for fiscal year 1979, a contract for construction of Navajo Dam Powerplant will be awarded late in fiscal year 1975. A contract to furnish and install the powerplant turbine will also be awarded so that the delivery and installation of the turbine can be integrated with the construction of the powerplant structure.

Power Transmission System, $100,000. The projects power transmission system will transmit the electric power from the power source to project pumping facilities. Part of the power transmission system is the Navajo Dam Powerplant Switchyard located at Navajo Dam and will be constructed under the same contract awarded for construction of the powerplant. Collection of field design data will continue. Acquisition of right-of-way will be completed.

Other Project Costs, $580,000. Includes the cost of constructing roads and bridges. Also includes costs for continuation of a program for developing a plan for settlement by the Navajos and for custodial operation and maintenance of completed project facilities.

Consolidated Expenditures and Credits, -$405,000. Represents nonappropriation cost transfers for Field Solicitor charges, miscellaneous items. Also includes an adjustment for the construction of roads and bridges for the Bureau of Indian Affairs funded from a separate allotment.

Change in Total Obligations	Obligations
1974 Estimate	$206,000,000
1975 Estimate	248,000,000
Increase	42,000,000

The $42 million increase is due to application of cost indexing.

1/ Includes a non-Federal advance of $90,000 in fiscal year 1975 by El Paso Natural Gas Company to cover additional costs due to change in the Main Canal alinement to accommodate the company's pipeline facilities.

NORTHERN PUEBLOS, $81,000. The work proposed for the Northern Pueblos for the fiscal year 1975 is:

Picuris Pueblo	
Canal lining	$27,000
Tesuque Pueblo	
Rehabilitate canal structures	27,000
Taos Pueblo	
Canal lining	27,000
Total	81,000

SOUTHERN PUEBLOS, $104,000. The work proposed for the Southern Pueblos for the fiscal year 1975 and the projects or pueblos involved are as follows:

Acoma Pueblo	
Canal lining	$26,000
Jemez Pueblo	
Canal lining	26,000

Zia Pueblo	
Canal lining	$26,000
Isleta Pueblo	
Canal lining	26,000
Total	104,000

ZUNI, $77,000. The Zuni irrigation project consists of five separate units ranging in size from 100 acres at Tekapo to 1,600 acres at the Zuni unit. Ultimate development of these units is limited by the available water supply. There are 4,727 acres of irrigable land under the present irrigation system. Preliminary hydrology studies indicate there is enough water available to irrigate 3,000 acres, provide adequate storage facilities and distribution systems are constructed.

A recent study by the U.S. Bureau of Reclamation indicates that under maximum probable flood conditions, the storage dams upstream of the Zuni Village are not safe. If a maximum probable flood occurred, it would cause a disaster such as that which occurred in the early 1960's on the Blackfeet Reservation in Montana. This would result in loss of life, property damages in the Zuni Village, and property damage to the Zuni Reservation lands. Future planning outlined in the Zuni Comprehensive Development Plan includes development of residential, industrial, and commercial investments in and around the Zuni Village, which would also be endangered.

The irrigation program for the fiscal year 1975 is the continuation of the program for the correction of structural deficiencies as disclosed by the recent Bureau of Reclamation study.

Utah

UINTAH AND OURAY PROJECT, $110,000. This project, located in northeastern Utah, was authorized by the Act of June 21, 1906 (34 Stat. 375). Construction of the project was initiated in 1906 and substantially completed by 1922. There are 78,950 acres of land with water rights included in the project. About 30 percent of the project area is affected by inadequate surface or sub-surface drainage. A drainage construction and rehabilitation program is needed to relieve this situation in order to maintain the productivity of the land and/or bring back into production lands that are now temporarily non-assessable because of drainage problems.

This feature of work and estimated cost will provide for:

Construct 5 miles of main and lateral drain	$50,000
Rehabilitate 20 miles of canal	60,000
Total	110,000

(c) Surveys, Investigations, and Plans, $608,000. This item represents the amount required for continuation of surveys, investigations, studies, and plans for the preparation of Feasibility, Completion (Definite Plan), and Rehabilitation and Betterment Reports to be made of all existing Indian irrigation projects under the jurisdiction of the Bureau of Indian Affairs. This work is necessary in order to establish a program for completing existing Indian irrigation projects presently authorized, developing additional Indian irrigation resources, and for the rehabilitation and betterment of existing irrigation works with a view to transferring the operation and maintenance of the completed projects from the Government to acceptable water user organizations. This item also provides funds for studies covering the safety of dams, studies of Pueblo lands included in the tributary units of the authorized San Juan-Chama Trans Mountain Diversion project,

studies relating the Ute Indian lands included within the Central Utah project, and studies for improvement of project power systems.

(d) Engineering and Supervision $845,846. This item represents the amount required to pay salaries, office rent, travel expenses, and miscellaneous expenses incidental to executing the irrigation program proposed for the fiscal year 1975. Staff employees engaged in irrigation activities are located in Phoenix, Arizona; Billings, Montana; Portland, Oregon; Sacramento, California; Albuquerque, New Mexico; Window Rock, Arizona; and the Washington Central Office.

Personnel Summary

Construction

	1973 Actual	1974 Estimate	1975 Estimate
BUREAU OF INDIAN AFFAIRS			
Total number of permanent positions.....	343	166	166
Full-time equivalent of other positions...	190	307	307
Average paid employment.....	494	611	454
Average GS grade.....	7.6	7.6	7.6
Average GS salary.....	$12,042	$12,660	$12,787
Average salary of ungraded positions.....	$9,336	$10,155	$10,815
ALLOCATION ACCOUNTS			
Total number of permanent positions.....	111	131	138
Full-time equivalent of other positions...	5	6	6
Average paid employment.....	117	135	142
Average GS grade.....	8.5	8.5	8.5
Average GS salary.....	$13,967	$14,701	$14,878
Average salary of ungraded positions.....	$11,859	$12,272	$12,575

ITEMIZATION OF ESTIMATE

DEPARTMENT OF THE INTERIOR
APPROPRIATION TITLE: Construction — Bureau of Indian Affairs

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) Decrease (-)
Program and Financing				
Total obligations.....	$37,429,060	$93,762,593	$51,875,000	-$41,887,593
Transferred to other accounts.....	58,622	116,065	-	-116,065
Unobligated balance available, start of year.....	-20,565,340	-39,155,658	-	+39,155,658
Unobligated balance available, end of year.....	39,155,658	-	-	-
Appropriation.....	56,078,000	54,723,000	51,875,000	-2,848,000

ITEMIZATION OF ESTIMATE (con.)

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) Decrease (-)
Obligations by object				
BUREAU OF INDIAN AFFAIRS				
11.0 Personnel compensation...	$7,378,000	$9,262,000	$6,527,000	-$2,735,000
Personnel benefits:				
12.1 Civilian.....	536,000	709,000	483,000	-226,000
21.0 Travel and transportation of persons.....	449,000	600,000	500,000	-100,000
22.0 Transportation of things.	373,000	500,000	350,000	-150,000
23.0 Rent, communications, and utilities.....	303,000	500,000	300,000	-200,000
24.0 Printing & reproduction..	44,000	100,000	50,000	-50,000
25.0 Other services.....	2,762,000	3,000,000	500,000	-2,500,000
26.0 Supplies and materials...	2,803,000	4,000,000	4,984,000	+984,000
31.0 Equipment.....	1,210,000	4,500,000	2,895,000	-1,605,000
32.0 Lands and structures.....	4,858,060	52,003,593	17,086,000	-34,917,593
41.0 Grants, subsidies and contributions.....	7,314,000	3,086,000	1,000,000	-2,086,000
Subtotal.....	28,030,060	78,260,593	34,675,000	-43,585,593
Quarters and subsistence charges.....	-17,000	-	-	-
Total, Bureau of Indian Affairs.....	28,013,060	78,260,593	34,675,000	-43,585,593
ALLOCATION TO BUREAU OF RECLAMATION				
11.0 Personnel compensation...	1,549,000	1,865,000	1,956,000	+91,000
Personnel benefits:				
12.1 Civilian.....	143,000	183,000	195,000	+12,000
21.0 Travel and transportation of persons.....	21,000	30,000	37,000	+7,000
22.0 Transportation of things.	53,000	61,000	67,000	+6,000
23.0 Rent, communications, and utilities.....	17,000	26,000	31,000	+5,000
24.0 Printing & reproduction..	10,000	17,000	18,000	+1,000
25.0 Other services.....	148,000	197,000	368,000	+171,000
26.0 Supplies and materials...	26,000	33,000	42,000	+9,000
31.0 Equipment.....	17,000	22,000	25,000	+3,000
32.0 Lands and structures.....	7,432,000	13,068,000	14,461,000	+1,393,000
Total, Bureau of Reclamation.....	9,416,000	15,502,000	17,200,000	+1,698,000
Total obligations...	37,429,060	93,762,593	51,875,000	-41,887,593

BUREAU OF INDIAN AFFAIRS

CONTRACT AUTHORITY AND LIQUIDATION PROGRAM

	Contract authority available	Obligations	Unliquidated obligations prior year	Obligations	Expenditures	Unliquidated obligations carried forward
			Fiscal Year 1973			
Federal-Aid Highway Roads..	$55,181,679	$52,758,566	$21,792,760	$74,551,326	$40,630,645	$33,920,681 1/
			Fiscal Year 1974			
Federal-Aid Highway Roads..	57,000,000	57,000,000	33,920,681	90,920,681	57,000,000	33,920,681 2/
			Fiscal Year 1975			
Federal-Aid Highway Roads..	60,000,000	60,000,000	33,920,681	93,920,681	63,500,000	30,420,681 3/

1/ Available cash for liquidation is $19,431,668; balance of $14, 489,013 is unfunded.

2/ Available cash for liquidation is $5,431,668; balance of $28,489,013 is unfunded.

3/ Available cash for liquidation is $931,668; balance of $29,489,013 is unfunded.

BUREAU OF INDIAN AFFAIRS

Status of Cash Appropriations for
Liquidation of Contract Authority

	1973	1974	1975
Appropriations.....	$45,539,000	$43,000,000	$59,000,000
Unexpended balance brought forward.....	14,523,313	19,431,668	5,431,668
Total available.....	60,062,313	62,431,668	64,431,668
Less: Outlays.....	40,630,645	57,000,000	63,500,000
Unexpended balance....	19,431,668	5,431,668	931,668

JUSTIFICATION

ROAD CONSTRUCTION (LIQUIDATION OF CONTRACT AUTHORITY) $59,000,000

Liquidation Program (Cash)

Liquidation of Contract Authority (Cash Program) - 1973, $40,630,645; 1974, $57,000,000; 1975, $63,500,000.

The estimate for the Road Construction Cash Program for fiscal year 1975 is $63,500,000 including $4,500,000 unexpended balance. This amount is required to liquidate $33,921,000 of unliquidated prior year obligations and the 1975 program obligations that come due for payment during the fiscal year. This cash program will result in unfinanced obligations of $29,489,013 at the end of the 1975 fiscal year.

Contract Authorization Program (Obligations) $60,000,000

Indian reservation roads - 1973, $52,758,566; 1974, $57,000,000; 1975, $60,000,000.

The contract authorization program originates in the Federal-Aid Highway Act. The Federal-Aid Highway Act of 1973 contains authorization in the amount of $75,000,000 to cover fiscal year 1975.

Need for Increase:

The Federal Government is responsible for the transportation system of 177 reservations, pueblos, and rancherias. This area of responsibility is equivalent to an area the size of the States of Pennsylvania, Maryland, and West Virginia.

A comprehensive road needs study of the reservation areas has been made pointing up an overall backlog of need of $924,000,000 to provide roads that are presently needed.

From this total backlog of needs, an immediate goal is to improve up to an adequate surface all of the arterial roads, all of the main connecting roads, all of the streets, and 50 percent of the local access roads. The cost of this immediate objective is $628,447,000. This immediate objective at the proposed level of funding is scheduled to be accomplished with a 7-8 year accelerated road construction program which began in fiscal year 1973.

Adequate roads can mean the difference between almost total isolation and easy mobility which in turn is the major factor affecting educational, economic and social development of reservation communities. Most reservations are isolated from centers where basic services are available. Existing roads are, in many cases, meager trails with 84 percent of the total Bureau road mileage being earth surfaced. The prime reason why the average non-Indian communities are more developed than the average Indian community is that the non-Indian communities have adequate roads which allow the necessary interaction with twentieth century facilities.

Since Indian people have become more involved in developing their reservations, the requests for road improvements have greatly increased and exceed available funds. Improvement projects to provide all-weather, dustfree surfaces of community streets are generally very high on the priority list of Indian requests.

The revervations are in generally isolated rural areas thereby causing transportation to be an essential factor in the accomplishment of the objectives. Tax-free Indian lands are not served adequately by State and county roads. Most reservations are situated where no county governments exist, and in the instances where county governments do exist they are not financially able to carry out the road function.

The 1973 Federal-Aid Highway Act extended the roads responsibilities of the Bureau to include roads serving villages, groups, or communities in which Indians or Alaska Natives reside, in addition to the traditional requirement of serving various forms of Indian lands. Additional funds are needed to meet these added responsibilities.

Recent legislation requires the safety inspection of all bridges on the Bureau road system, and encourages the replacement of all unsafe and hazardous structures. This responsibility requires funds beyond the normal road improvement program level.

The National Environmental Policy Act of 1969 has placed additional workload upon this program. It is estimated during fiscal year 1975 that the required environmental impact studies and the preparation and review of environmental impact statements will require 14 man years and approximately $168,000 in personal services to perform this work.

The recent Occupational Safety and Health Act sets forth standards for equipment and work procedures which add considerable to the unit cost of road construction.

The following is a brief synopsis of the 1975 fiscal year program of Indian reservation roads:

1.	Grading and draining	446 miles
2.	Paved surfacing	577 miles
3.	Gravel surfacing	148 miles
4.	Bridge construction	2,803 linear ft.
5.	Project planning	663 miles

Personnel Summary

Road Construction (Liquidation of Contract Authority)

	1973 Actual	1974 Estimate	1975 Estimate
BUREAU OF INDIAN AFFAIRS			
Total number of permanent positions.....	460	452	416
Full-time equivalent of other positions...	612	1,067	1,115
Average paid employment.....	1,004	1,466	1,480
Average GS grade.....	7.6	7.6	7.6
Average GS salary.....	$12,042	$12,660	$12,787
Average salary of ungraded positions.....	$9,535	$10,155	$10,815
ALLOCATION TO FEDERAL HIGHWAY ADMINISTRATION DEPARTMENT OF TRANSPORTATION			
Total number of permanent positions.....	33	31	31
Full-time equivalent of other positions...	2	2	2
Average paid employment.....	35	33	33
Average GS grade.....	8.2	8.2	8.2
Average GS salary.....	$13,918	$14,763	$12,514

ITEMIZATION OF ESTIMATE

DEPARTMENT OF THE INTERIOR
APPROPRIATION TITLE: Road Construction (Liquidation of Contract Authority)

			Bureau of Indian Affairs	
	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) Decrease (-)
Program and Financing				
Total obligations.....	$52,758,566	$57,000,000	$60,000,000	+$3,000,000
Unobligated balance available, start of year.....	-55,181,679	-2,423,113	-95,423,113	-93,000,000
Unobligated balance available, end of year.....	2,423,113	95,423,113	110,423,113	+15,000,000
Contract authority (New) (Perm)....	-	150,000,000	75,000,000	-75,000,000

ITEMIZATION OF ESTIMATE (con.)

		Actual 1973	Estimate 1974	Estimate 1975	Increase (+) Decrease (-)
Obligations by Object					
BUREAU OF INDIAN AFFAIRS					
11.0	Personnel compensation....	$10,526,000	$14,688,000	$14,859,000	+$171,000
	Personnel benefits:				
12.1	Civilian.....	775,000	1,085,000	1,099,000	+14,000
21.0	Travel and transportation of persons.....	520,000	550,000	550,000	-
22.0	Transportation of things..	530,000	530,000	530,000	-
23.0	Rent, communications, and utilities.....	1,946,000	1,900,000	2,000,000	+100,000
24.0	Printing and reproduction.	-	100,000	100,000	-
25.0	Other services.....	14,333,000	10,000,000	12,000,000	+2,000,000
26.0	Supplies and materials....	3,230,000	10,000,000	10,000,000	-
31.0	Equipment.....	2,126,000	2,000,000	2,000,000	-
32.0	Lands and structures.....	16,835,566	14,613,000	12,937,000	-1,676,000
41.0	Grants, subsidies and contributions.....	264,000	-	-	-
42.0	Insurance claims and indemnities.....	2,000	-	-	-
	Subtotal.....	51,087,566	55,466,000	56,075,000	+609,000
	Quarters and subsistence charges.....	-75,000	-75,000	-75,000	-
	Total, Bureau of Indian Affairs....	51,012,566	55,391,000	56,000,000	+609,000
ALLOCATION TO FEDERAL HIGHWAY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION					
11.0	Personnel compensation....	402,000	397,000	417,000	+20,000
	Personnel benefits:				
12.1	Civilian.....	35,000	35,000	36,000	+1,000
21.0	Travel and transportation of persons.....	129,000	129,000	129,000	-
22.0	Transportation of things..	42,000	42,000	42,000	-
24.0	Printing & reproduction...	6,000	6,000	6,000	-
25.0	Other services.....	418,000	418,000	418,000	-
26.0	Supplies and materials....	7,000	7,000	7,000	-
32.0	Lands and structures.....	707,000	575,000	2,945,000	+2,370,000
	Total, Federal Highway Administration..	1,746,000	1,609,000	4,000,000	+2,391,000
	Total obligations.....	52,758,566	57,000,000	60,000,000	+3,000,000

BUREAU OF INDIAN AFFAIRS

Miscellaneous Appropriations
(Alaska Native Claims)

Appropriation, 1973	$50,000,000
Appropriation, 1974	70,000,000
Decreases:	
Alaska Native Claims	70,000,000
Increases:	
Alaska Native Claims	70,000,000
Budget estimate 1975	70,000,000

	Amount Available 1974	F.Y. 1975 Budget Estimate	Total Available 1975 compared to total available 1974
Alaska Native Claims	$70,000,000	$70,000,000	- -

The Alaska Native Claims will be used for the settlement of land claims of Alaska Natives. This settlement will be accomplished in conformity with the real economic and social needs of Natives, with maximum participation by Natives in decisions affecting their rights and property, without litigation, without establishing any permanent racially defined institutions, rights, privileges, or obligations, without creating a reservation system or lengthy wardship or trusteeship, and without adding to the categories of property and institutions enjoying special tax privileges, or to the legislation establishing special relationships between the United States Government and the State of Alaska, as provided by Public Law 92-203 (85 Stat. 688), approved December 18, 1971.

ADMINISTRATIVE PROVISIONS

Explanation of Language Change

The language provides for the purchase of 73 Police type vehicles of which 63 shall be for replacement only. The additional vehicles are needed to carry out the law and order responsibilities of the Bureau.

TRUST FUNDS

Highlight Statement

A. Tribal Funds:

Tribal funds are deposited into the U. S. Treasury pursuant to various acts of Congress to be made available for expenditure for the use and benefit of the respective tribal groups. About 300 Indian tribes, bands or identifiable

groups have some 700 accounts which are maintained separately by the Bureau of Indian Affairs and in a consolidated account in the U. S. Treasury which are used for the conduct of tribal financial programs, enterprises, businesses, per capita payments and other tribal affairs. Approximately fifty percent of tribal funds is derived from judgments or awards made pursuant to either general or specific acts of Congress. The remainder of the funds is derived from Federal management of tribal real properties, the title to which is held in trust by the United States for the tribes.

Tribal funds are available for various purposes, under various acts of Congress and are also subject to the provisions of tribal constitutions, bylaws, charters, and resolutions of the various tribes, bands or groups. For the past several years, the Congress has required that special legislation be enacted to permit the expenditure of judgment funds. The Act of October 19, 1973 (87 Stat. 466) provides general authority for the distribution of funds appropriated in satisfaction of judgments of the Indian Claims Commission and the Court of Claims, subject to certain conditions, including the development of a plan for the use of the funds. Funds derived from the management of tribal trust properties are available for tribal use in accordance with approved budgets under Permanent, Annual or Indefinite Authorizations.

Funds programmed under permanent authorization are made available under legislation which gives the Secretary of the Interior continuing authority to carry out the provisions of specific acts, and can be disbursed either through the Indian Service Special Disbursing Agents' accounts or advanced to tribes for disbursement by their bonded tribal treasurers under approved plans of operation. These funds do not require annual approval by Congress but are reported annually in the budget schedules to give the Congress an opportunity to review the activity conducted under the authorities extended to the Secretary of the Interior.

In the absence of permanent authorization, annual appropriation by the Congress is required to permit the use of tribal funds. Such authority is provided annually in the Department of the Interior Appropriations Act and includes two categories: (1) Annual definite; and (2) Annual indefinite.

Funds programmed under annual definite are not otherwise available for expenditure without Congressional action and the $3 million requested for fiscal year 1975 is to provide the Secretary of the Interior with expenditure authority for the execution of programs, primarily for those tribes which are not sufficiently organized to be represented by a recognized governing body. Expenditures made under this authority are individually made through Treasury regional disbursing offices, subject to the same regulations and procedures as appropriations from the general fund of the Treasury.

The annual indefinite authorization in the Appropriation Act, under the heading Tribal Funds, provides the necessary authority, on an annual basis, for the Secretary of the Interior to withdraw from tribal accounts in the Treasury, funds needed to carry out programs designated by a particular tribe and approved by the Secretary for the conduct of tribal operations, including, but not limited to: management of tribal resources and other programs designed to improve the situation of the general membership. These funds are advanced to tribes for disbursement by Indian Service Special Disbursing Agents or by bonded tribal treasurers under plans of operation.

B. Alaska Native Fund:

This fund was derived from the settlement of land claims of Alaska Natives as authorized by the Act of December 18, 1971 (85 Stat. 688). Section 5 of the Act directed the Secretary of the Interior to prepare a roll of the Alaska Natives living at the time of enactment (December 18, 1971) by region, village or other residence as of the date of the 1970 census enumeration, to be completed on or before December 18, 1973. Thereafter (with the exception of a reserve for attorney and similar fees, and an equitable share for a thirteenth regional corporation, pending final decision as to whether to establish one, and completion of its final organization) all the assets of the fund are to be distributed at the end of each quarter of the fiscal year to twelve, or possibly thirteen, regional corporations on the basis of the relative numbers of Natives living in each region of the state, as ascertained by the roll.

C. Miscellaneous Trust Funds:

Included in this category are miscellaneous revenues derived from Indian reservations, agencies, and schools, which are not required to be used for other purposes, but are used to support schools and agency functions. It also includes contributions, donations, gifts, etc., to be used and/or invested with the income to be used for the relief and benefit of American Indians.

Trust Funds

	1973	1974	1975
1. Annual Definite Authorization....	$ 2,615,816	$ 3,000,000	$ 3,000,000
2. Annual Indefinite Authorization..	15,895,652	15,500,000	15,500,000
3. Permanent Authorization.....	134,829,521	145,500,000	83,500,000
4. Alaska Native Fund.....	50,000,000	70,000,000	70,000,000
5. Miscellaneous Trust Funds.....	3,829,751	4,500,000	4,000,000
Total.....	$207,170,740	$238,500,000	$176,000,000

BUREAU OF INDIAN AFFAIRS
ANNUAL DEFINITE AUTHORIZATION--TRIBAL FUNDS

Statement Relating to 1973, 1974 and 1975 Programs

1973 Appropriation	$3,000,000
1974 Budget Estimate	$3,000,000
Total Appropriation for 1974	$3,000,000
Deductions: (None)	...
Additions: (None)	...
Total Estimate for 1975	$3,000,000

Analysis of Annual Definite Authorization, Tribal Trust Funds, by Activity:

Activities	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease(-) 1974 Compared w/1975
1. Education and Welfare Services	$ 93,549	$ 105,675	$ 105,675	...
2. Resources Management	765,562	841,612	841,612	...
3. Construction and Land Acquisition	276,677	343,074	343,074	...
4. General Tribal Affairs	1,480,028	1,709,639	1,709,639	...
Total	$2,615,816	$3,000,000	$3,000,000	...

Tribal Funds--Annual Definite: Fiscal 1974, $3,000,000; fiscal year 1975, $3,000,000; no change.

Status of Programs

Funds programmed under the annual definite authorization as shown on the following tabulation are to be used for various education and welfare programs, resources management, construction and land acquisition and general tribal affairs, including taxes and attorneys' fees. All amounts in the estimate have been requested properly by the Indians except the sum of $291,827 shown for miscellaneous tribes. The amount under miscellaneous tribes is required to provide for additional tribal requests that can be anticipated during the fiscal year.

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COMPARATIVE STATEMENT OF ANNUAL DEFINITE AUTHORIZATION BY TRIBE

STATE-AGENCY-TRIBE	1973	1974	1975
Arizona	$ 625,435	$ 672,574	$ 672,574
Colorado River	20,059	68,574	68,574
Navajo	572,876	569,000	569,000
Salt River--Salt River-Pima	22,500	25,000	25,000
San Carlos Agency--San Carlos Apache	10,000	10,000	10,000
California	501,147	381,920	381,920
Agua Caliente	116,452	115,470	115,470
Barona	464	500	500
Baron Long	650	650	650
Hoopa Valley	365,000	265,000	265,000
Manchester-Point Arena Rancheria, Pomo Band	1,241	...	...
Santa Rosa (Kings County)	290	300	300
Tule River	17,050	...	...
Colorado	6,200	6,200	6,200
Southern Ute	6,200	6,200	6,200
Idaho	52,500	52,500	52,500
Coeur d'Alene	17,200	17,200	17,200
Nez Perce	35,300	35,300	35,300
Minnesota	75,514	79,724	79,724
Red Lake	75,514	79,724	79,724
Montana	58,282	93,500	93,500
Blackfeet	6,282	6,000	6,000
Fort Peck	52,000	87,500	87,500

STATE-AGENCY-TRIBE (Continued)	1973	1974	1975
New Mexico	$ 107,305	$ 108,000	$ 108,000
Jicarilla	107,305	108,000	108,000
Oklahoma	320,772	398,991	398,991
Cherokee	4,870	...	...
Chickasaw	56,364	44,741	44,741
Choctaw	52,000	56,400	56,400
Creek	79,738	86,350	86,350
Osage	127,800	211,500	211,500
Oregon	999	...	...
Umatilla	999	...	...
Washington	787,914	844,764	844,764
Colville	153,200	113,200	113,200
Makah	15,441	23,940	23,940
Quinault	20,500	...	...
Spokane	39,450	38,020	38,020
Yakima	559,323	669,604	669,604
Wyoming	79,748	70,000	70,000
Arapahoe	39,874	35,000	35,000
Shoshone	39,874	35,000	35,000
Miscellaneous Tribes	...	291,827	291,827
GRAND TOTAL	$2,615,816	$3,000,000	$3,000,000

DEPARTMENT OF THE INTERIOR

Office of Territorial Affairs

HIGHLIGHT STATEMENT

The fiscal year 1975 budget request for the account "Administration of Territories" totals $15,000,000, an increase of $500,000 over fiscal year 1974.

American Samoa

The proposed 1975 appropriation for American Samoa is $14,000,000, the same amount as was appropriated for fiscal year 1974. This proposed funding program provides $320,000 for the Governor's office and $356,000 for the Judiciary. Federal grants for operations totalling $13,324,000 complete this funding request.

American Samoa continues to become less dependent on Federal funding. For example in fiscal year 1973 Federal funding (all sources) accounted for approximately 2/3 of it's budgeted resources. Continued economic development and self sufficiency has reduced this dependency to approximately 53% in fiscal year 1975.

Guam

The sum of $1,000,000 in grant funds is requested for Guam economic development as authorized in the Guam Development Fund Act of 1968, an increase of $500,000 over the current year appropriation. With this request a total of $2,500,000 will be available to it's citizenary for the development of competitive business enterprises.

U.S. Comptrollers

The fiscal year 1975 budget provides new funding of $875,000 for the U.S. Comptroller, Virgin Islands, and $625,000 for the U.S. Comptroller, Guam. The funding for these activities are provided under the provisions of P.L. 90-496 and P.L. 90-497 and are included in the "Administration of Territories" account for budgetary purposes.

Appropriation Language Change

The appropriation language change -- elimination of the phrase "by transfer" in regard to the Comptroller's functions is proposed for fiscal year 1975. A change in accounting and budget display procedures makes this phrase unnecessary.

TERRITORIAL AFFAIRS
ADMINISTRATION OF TERRITORIES

Appropriation, 1973		$22,375,000
Transferred from "Internal Revenue Collections for Virgin Islands" (P.L. 90-497)	$470,000	
Transferred from "Guam, Sec. 30 funds" (P.L. 90-496)	469,000	
Net transfers, 1973		939,000
Total available, 1973		23,314,000
Appropriation/Total available, 1974		14,500,000

Summary of Increases and Decreases, 1975

	Base for 1974	Increase 1975	
Guam:			
Guam Economic Development Fund	$500,000	+500,000	
American Samoa:			
Operating costs for the Governor's Office and Chief Justice and High Court	556,000	+120,000	
Grants for Operations	13,444,000	-120,000	
Net Increase, 1975			+500,000
Budget Estimate, 1975			15,000,000

TERRITORIAL AFFAIRS
ADMINISTRATION OF TERRITORIES

Analysis by Activity

Activity/Subactivity	F.Y. 1973 Amount Available	Fiscal Year 1974 Total Appropriation	Unobligated Balance	Amount Available
Direct Program:				
1. Virgin Islands:				
(a) Transfers to Comptroller's Office (P.L. 90-496)	$ 474,857	$ ---	$ ---	$ ---
2. Guam:				
(a) Loans	3,393,322	---	2,210,000	2,210,000
(b) Grants	2,637,143	---	1,070,000	1,070,000
(c) Economic Development Fund	750,000	500,000	250,000	750,000
(d) Transfers to Comptroller's Office (P.L. 90-497)	446,180	---	---	---
Subtotal, Guam	7,226,645	500,000	3,530,000	4,030,000
3. American Samoa:				
(a) Governor's Office	272,033	284,000	10,877	294,877
(b) Chief Justice and High Court	254,863	272,000	---	272,000
(c) Grants	15,497,763	13,444,000	352,025	13,796,025
Subtotal, American Samoa	16,024,659	14,000,000	362,902	14,362,902
Reimbursable Program:				
1. U.S. Comptroller, Virgin Isl.	150	645,000	99,359	744,359
2. U.S. Comptroller, Guam	22,259	420,000	176,385	596,385
Total Reimbursable Program	22,409	1,065,000	275,744	1,340,744
4. GRAND TOTAL	23,748,570	15,565,000	4,168,646	19,733,646

NOTE: In addition, the following amounts are currently available in fiscal year 1974 and are included in the fiscal year 1975 obligational program:

Guam loans	$4,175,522
Guam grants	2,347,324
Total	6,522,846

TERRITORIAL AFFAIRS
ADMINISTRATION OF TERRITORIES

Analysis by Activities

Activity/Subactivity	F.Y. 1974 Amount Available	Fiscal Year 1975 Estimated Total Available	Fiscal Year 1975 Unobligated Balance From 1974	Fiscal Year 1975 Budget Estimate	Total Available 1975 Compared to Total Available 1974	Page Reference
Direct Program:						
1. Virgin Islands:						
(a) Transfer to Comptroller's Office (P.L. 90-496).....	$ ---	$ ---	$ ---	$ ---	$ ---	--
2. Guam:						
(a) Loans.....	2,210,000	4,175,522	4,175,522	---	+1,965,522	--
(b) Grants.....	1,070,000	2,347,324	2,347,324	---	+1,277,324	--
(c) Economic Development Fund.	750,000	1,000,000	---	1,000,000	+250,000	9
(d) Transfers to Comptroller's Office (P.L. 90-497).....	---	---	---	---	---	--
Subtotal, Guam.....	4,030,000	7,522,846	6,522,846	1,000,000	+3,492,846	
3. American Samoa:						
(a) Governor's Office.....	294,877	320,000	---	320,000	+25,123	19
(b) Chief Justice and High Court.....	272,000	356,000	---	356,000	+84,000	22
(c) Grants.....	13,796,025	13,324,000	---	13,324,000	-472,025	25
Subtotal American Samoa.....	14,362,902	14,000,000	---	14,000,000	-362,902	
TOTAL DIRECT PROGRAM..	18,392,902	21,522,846	6,522,846	15,000,000	+3,129,944	
Reimbursable Program:						
1. U.S. Comptroller, Virgin Isl..	744,359	975,000	100,000	875,000	+230,641	6
2. U.S. Comptroller, Guam.....	596,385	625,000	---	625,000	+28,615	10
TOTAL REIMBURSABLE PROGRAM.....	1,340,744	1,600,000	100,000	1,500,000	+259,256	
GRAND TOTAL.....	19,733,646	23,122,846	6,522,846	16,500,000	+3,389,200	

BUDGET AUTHORITY REQUESTED FOR FISCAL YEAR 1975
ADMINISTRATION OF TERRITORIES
BY ACTIVITY

	F.Y. 1974	F.Y. 1975	Increase (+) Decrease (-)
Guam:			
Economic Development Fund.....	$ 500,000	$1,000,000	$+500,000
Total Guam.....	500,000	1,000,000	500,000
American Samoa:			
Governor's Office.....	284,000	320,000	+36,000
Judiciary.....	272,000	356,000	+84,000
Grants.....	13,444,000	13,324,000	-120,000
Total American Samoa.....	14,000,000	14,000,000	---
Total Appropriated Request (Budget Authority).....	14,500,000	15,000,000	+500,000
Reimbursable Program:			
Comptroller, Virgin Islands.....	645,000	875,000	+230,000
Comptroller, Guam.....	420,000	625,000	+205,000
Total.....	1,065,000	1,500,000	+435,000

COMPTROLLER - VIRGIN ISLANDS

Comptroller's Office, Virgin Islands: Fiscal year 1974, $645,000; fiscal year 1975, $875,000; increase, $230,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$+230,000	+2	$975,000	36	Increased funding for additional staff and reduction of lapses.

	1973	1974	1975	Increase
New authority.....	470	645	875	+230
Unobligated balance applied to budget program.....	5	99	100	+1
Total Program Requirement.	475	744	975	+231
Full-time permanent positions authorized.....	26	34	36	+2

Cost-Factors Involved in Increases

$80,000 for two additional positions for systems and procedure assistance.

$150,000 for reduction of lapses (3 man-years), annualization of pay increases, within-grade step increases, and other office support costs associated with the increased staffing complement.

The Government Comptroller for the Virgin Islands is charged with the responsibility for audit of all revenues and expenditures of all departments and agencies of the Territorial Government of the Virgin Islands of the United States. In a law enacted in 1968 (P.L. 90-496) the Congress spelled out that the audit activites of the Government Comptroller should be directed so as to (1) improve the efficiency and economy of programs of the Government of the Virgin Islands and (2) discharge the responsibility incumbent upon the Congress to insure that the substantial Federal revenues which are covered into the treasury of the Government of the Virgin Islands are properly accounted for and audited.

Systems and Procedures Assistance

The audits made by the Comptroller's Office have continued to disclose important deficiencies in the accounting/financial area of the Virgin Islands Government operations. The Territorial Government has spent considerable amounts on professional consulting services in attempting to improve its financial and accounting practices during the past few years. However, this has not been effective and most of the recommendations by the various consulting firms have not been implemented. The Virgin Islands Government needs assistance in this area. The assistance should be provided by highly trained professional Systems Accountants who can be assigned to projects in the trouble areas and stay with these projects long enough for the difficulties to be eliminated and to insure the continued proper operation of the system by Virgin Islands Government employees. Some of these assignments may last for several months.

The assistance can best be provided by the addition of Systems Accountants to the Comptroller's Staff. Their function will be to assist the Virgin Islands Government in correcting deficiencies. One Systems Accountant was authorized during 1973. An additional Systems Accountant was authorized for fiscal year 1974. Since it appears that the work of the Systems Accountants will very materially contribute to improving the financial/accounting affairs of the Virgin Islands Government two new positions are requested for this purpose for fiscal year 1975. These employees will not only assist the Virgin Islands Government in designing new systems and streamlining procedures but with the approval of the Virgin Islands Government they will also train employees in implementing new procedures and remain on the job long enough to insure that the new procedures are actually functioning satisfactorily.

Auditing

As disclosed by the attached summary of the Audit Workload as of July 1, 1973, the total audit workload is approximately 18,226 man-days or 83 man-years. It is not feasible, however, to attempt to perform all of the audit work in one year and an objective of doing it in approximately three years has been established. A three year cycle will require approximately 28 auditors which is two more than the staff authorized for fiscal year 1974. However, there are six vacancies on the audit staff at this time (Jan. 1974). It has been possible to recruit auditors at the lower grades, but it is expected that more difficulty will be encountered in recruiting the needed audit staff at the "In-charge" level. Requests for additional auditors must however be deferred until all existing vacancies are filled and the audit workload reappraised.

Accomplishments

Through fiscal year 1973 measurable benefits to the Government of the Virgin Islands resulting from the work of the Comptroller's Office has exceeded $16.2 million. This figure comprises $11.8 million from U.S. taxes collected on Virgin Islands

alcoholic beverage shipments which had been underpaid by the U.S. Treasury and $4.4 million recovered as a result of inquiries and exceptions issued by the Comptroller covering overpayments, duplicate, and erroneous payments. In addition, as a result of audits completed and currently in progress, the Government Comptroller since July 1972 has issued a total of 316 inquiries and exceptions and notices of failure to collect amounting to almost $5 million. Other recent substantial savings to the Territorial Government which can be attributed to the work of this office includes stopping of a proposed payment of $153,000 to an individual which had been authorized without receipt of consideration; analyses and computations of unreported rental collections and cash shortages in excess of $20,000; repayment of relocation allowances and payments totalling $8,500 from certain officials; moving the Government to terminate certain uneconomic long-term leases; and persuading certain department heads through the Governor to institute actions to collect overpayments to numerous government employees totalling in excess of $300,000. In the annual report for fiscal year 1973 the Comptroller was not able to express an opinion as to the fairness of the financial statements of the Territorial Government because of the inadequacy of accounting records, the lack of accounting control over cash, receivables, and fixed assets, and the limitations on the scope of our examinations. The government has found it necessary in fiscal year 1972 and fiscal year 1973 to make net adjustments which reduce the recorded general fund cash balances by over $1.9 million covering errors relating to prior years' activities that were discovered as a result of attempts to reconcile bank accounts. One of the largest bank accounts which as of the end of fiscal year 1973 showed an outstanding check figure of $13.9 million has not been reconciled since February 1972 when the last listing of outstanding checks was made.

A specific example of the Comptroller's Office is the West Indian Transport Company case which is scheduled for trial in the U.S. District Court in the Virgin Islands during January 1974. It involves the alleged diversion and sale of water belonging to the Virgin Islands Government to such islands as St. Martens, Little Dix, etc. by the Barge Company and involves very substantial amounts. The case is the result of audit by the Comptroller's Office and the Comptroller's Office is assisting the Department of Justice in preparation of the case for trial and a representative of the Comptroller will testify at the trial.

SUMMARY OF AUDIT WORKLOAD
July 1, 1973

DEPARTMENT OR AGENCY AUDITED	MAN-DAYS
1. Executive Offices of the Governor	1,099
2. Office of the Lieutenant Governor	664
3. Department of Education	1,142
4. Department of Public Works	1,412
5. Department of Finance - Except Tax Division	1,590
6. Department of Finance - Tax Division Only	746
7. Department of Property and Procurement	995
8. Department of Public Safety	1,003
9. Department of Agriculture	409
10. Department of Labor	697
11. Department of Commerce	741
12. Department of Social Welfare	479
13. Department of Health	1,051
14. Department of Law	594
15. Department of Housing & Community Renewal	413
16. Department of Conservation & Cultural Affairs	742
17. Municipal Courts of the Virgin Islands	182
18. Supervisor of Electrons & Election Boards	236
19. Legislature of the Virgin Islands	158
20. College of the V.I. including Teacher Development and Training Program	630
21. Water and Power Authority	612
22. Port Authority	582
23. Virgin Islands Housing Authority	220
24. Virgin Islands Lottery	180
25. Annual Certification of Net Revenues	15
26. Annual Report of the Fiscal Condition of the Government of the V.I., to the Secretary of the Interior and the Governor of the V.I., to be submitted by the Secretary to the Congress of the United States	550
27. Federal Grants and Contracts	440
28. Special Audits	110
29. Other Audits - Governmentwide	534
Total Audit Workload	18,226

Note 1. Audits should be made on the average on a three year cycle.

GOVERNMENT OF GUAM
GUAM DEVELOPMENT FUND ACT

Guam Development Fund Act: Fiscal year 1974, $500,000; fiscal year 1975, $1,000,000; increase, $500,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$+500,000	--	$1,000,000	--	Additional funding for promoting economic development.

Public Law 90-601, "Guam Development Act of 1968" was passed for the purpose of promoting economic development within the Territory of Guam. Through fiscal year

1974, a total of $1,500,000 has been appropriated and made available to the citizens of Guam for this purpose. This request of $1,000,000 of the third increment of the $5,000,000 which was authorized by the Act.

Each $1,000,000 to be appropriated under the terms of this Act will be utilized according to the same formula: 15% for agricultural loans; 15% for fishery loans; 10% for tourist development, 40% for back-up facilities, and 20% for Industrial/Commercial facilities. There is a great shortage of local capital available for investment on Guam. At the present time outside investors are dominating the market. The Guam Development Fund Act was enacted specifically to enable local residents to launch into competitive business enterprises, and to develop aspects of the economy at present neglected.

It is planned that the $1,000,000 Loan Funds be allocated as follows:

Agriculture	
Direct loans	$150,000
Back-up facilities	200,000
Fishing	
Direct loans	150,000
Back-up facilities	200,000
Tourism	
Direct loans	100,000
Industrial/Commercial facilities	200,000
Total	1,000,000

COMPTROLLER - GUAM

Comptroller's Office, Guam: Fiscal year 1974, $420,000; fiscal year 1975, $625,000; increase, $205,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$+205,000	---	$625,000	19	Increased funding requirement primarily from utilization of prior year carryover.

(in thousands of dollars)

	1973	1974	1975	Increase/Decrease
New authority	469	420	625	+205
Unobligated balance applied to budget program	-1	176	---	-176
Total program requirement	468	596	625	+29
Full-time permanent positions	18	19	19	---

Cost Factors Involved in Increases

$176,000 increase in new authority resulting from utilization of prior year carryover funds in the current fiscal year.

$29,000 for increase salary costs resulting from annualization of pay increases, within-grade step increases, promotion commitments, and reduction of lapses.

Public Law 90-497 provided that the salaries and expenses of the Government Comptroller for Guam shall be paid from funds otherwise covered into the Treasury of Guam, pursuant to Section 30 of the Organic Act of Guam (64 Stat. 384, 48 U.S.C. 1422).

Since the inception of this office on July 19, 1969, the Comptroller's Office has prepared 78 audit reports which contain 896 recommendations. The Government of Guam generally concurs with these recommendations and has implemented, is in the process of implementing, or plans to implement these recommendations on which they agree. Estimated savings realized total $272,906 one-time savings and annual actual savings or additional revenue realized is estimated to be $8,518,650. Potential additional savings or additional revenue that could be realized through the implementation of all of the Comptroller's recommendations is estimated to be $10,445,000 annually and $3,439,140 on a one-time basis.

With the funds available for fiscal year 1974 and requested for fiscal year 1975, the Comptroller's Office expects to have completed a management-type audit on all Government of Guam organizational entities by June 30, 1974. Beginning in fiscal year 1975 the Office expects to be on a two-year cycle. Thus, by the end of fiscal year 1976 all organizational entities of the Government of Guam will have had two management-type audits. In addition, we expect to discharge our responsibilities with respect to the annual fiscal audits and annual reports, as well as execute such special audits as requested by those so authorized. In our opinion, the accomplishment of these objectives will provide the Government of Guam with adequate audit coverage.

Note: Public Law 93-111 approved September 21, 1973 which provides authorizing legislation for the Trust Territory Government, also provides that the Comptroller of Guam shall audit the operations of the Trust Territory Government. Seven positions and $225,000 has been included in the Trust Territory budget request for this activity.

GOVERNMENT OF AMERICAN SAMOA

HIGHLIGHT STATEMENT

Fiscal Year 1975

Description of the Territory

The territory of American Samoa consists of a group of seven islands located 2,300 miles southwest of Hawaii and 1,600 miles northwest of New Zealand. Total land area of the seven islands is 76 square miles. A current population of 29,000 live in the American Samoa Territory with approximately 25,000 occupying the main island of Tutuila. Approximately 96 percent of land is communally owned, and land use and property are principally controlled by the matais who administer Samoan aiga (extended family units).

Government of Authority and Responsibility

The role and responsibilities of the United States in the American Samoan territory are prescribed in the Treaty Agreement of 1900 between the United States, Great Britain, and Germany. This treaty was accompanied by a series of deeds of cession negotiated between the United States and the chiefs of the seven islands. The treaty allowed the United States to establish a naval base at Pago Pago harbor. The treaty also obligated the United States to promote the economic, political, health, and educational development of American Samoa and to do so without interfering with the customs of the Samoan people. This responsibility was carried out by the United States Navy until 1951, at which time administration of the territory was transferred to the Department of the Interior by Executive Order No. 10264.

Plans and Policies

The principal operating policy of the Government of American Samoa is to develop the territory, leading to self-sufficiency and to attain this with minimum disturbance of the traditional Samoan cultural values.

The range of programs and services provided by the Government of American Samoa is very broad. These include the executive, legislative, and judicial functions of self-government. In addition, the typical governmental services of police and fire protection, public education, roads, water, sewer, parkland development and maintenance are provided. To date, the territory is still insufficiently developed to have enabled private interests to offer other public services. Thus, the Government of American Samoa remains the principal provider in the territory of medical services, news services, marine resource development, employment assistance, tourism development, port services, local telephone and overseas communications, electric utility and harbor, airport and industrial park development. It is the plan of this Government to transition as many of these latter categories of activities to private providers as rapidly as they can be assumed by responsible sources.

Fiscal Year 1975 Program

The FY 1975 request for Department of the Interior budget authority is $14,000,000, the same amount as was appropriated for FY 1974. The total budget estimate for the Government of American Samoa, considering all sources of revenue, is $37,176,000 for FY 1975, or $2.22 million greater than FY 1974.

The principal policy applied to decisions concerning individual budget requests was to favor those programs and projects which we believe will foster development of the territory toward self-sufficiency and self-determination.

Requested Department of the Interior budget authority for FY 1975 is for basic operations only. This is in contrast to previous years use of this funding source for both operations and capital improvement projects. The concentration of Department of the Interior funding to support basic operations only simplifies the overall system of financing the government.

Direct Congressional Appropriations are again requested to finance the Governor's Office and Judiciary Branch of the GAS. Department of the Interior grant-in-aid funds are requested for administration, legal affairs, education, health services and design, operations and main-

tenance of capital improvements. All construction project financing will be borne by local appropriations in FY 1975. This generates more local involvement in decision processes to select capital improvements projects and priorities. It also simplifies the process of reprogramming of funds in the event CIP plans are changed.

Total employment of the Government of American Samoa will increase to 3,813 in FY 1975 up from 3,716 in the previous year. The total number of contract and U.S. Civil Service employees is 235, or one less than FY 1974.

GOVERNMENT OF AMERICAN SAMOA
TOTAL BUDGET
SUMMARY BY SOURCE OF FUNDS

	Approved FY 1973	Approved FY 1974	Proposed FY 1975
Basic FY Appropriations			
Direct Congressional Appropriations	520,000	556,000	676,000
Department of Interior Grant-in-Aid	14,510,000	13,444,000	13,324,000
Basic Local Appropriations	7,571,000	11,377,000[1/]	17,525,000[2/]
Sub-Total	22,571,000	25,377,000	31,525,000
Local Appropriations-Excess Revenues:			
FY1972 Excess Revenues - PL 12-36	47,000	N.A.	N.A.
FY1972 Excess Revenues - PL 12-57	1,540,000	15,000	N.A.
FY1973 Excess Revenues - PL 13-18	908,000	1,237,000	N.A.
FY1973 Excess Revenues - PL 13-21	302,000	47,000	N.A.
FY1973 Excess Revenues - PL 13-27	N.A.	100,000	N.A.
FY1973 Excess Revenues - PL 13-36	N.A.	1,894,000	N.A.
Total Appropriated Funds	25,398,000	28,670,000	31,525,000
Federal Grants			
Received and Anticipated	5,545,000	6,286,000	5,651,000
Total Appropriations & Grants	30,943,000	34,956,000	37,176,000

1/ PL 12-68

2/ Budget approved in principle; appropriating legislation not yet enacted

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GOVERNMENT OF AMERICAN SAMOA
PROGRAM DISTRIBUTION SUMMARY[1]/

	Approved FY 1973	Approved FY 1974	Proposed FY 1975	Over (+) Or Under (-) FY 1974	Sources of FY 1975 Funds: Interior Budget Authority	Sources of FY 1975 Funds: Local Revenue Approp.
Direct Appropriations						
Governor's Office	348,000	349,000	383,000	+34,000	320,000	63,000
Judiciary	264,000	285,000	356,000	+71,000	356,000	-0-
Total Appropriations	612,000	634,000	739,000	+105,000	676,000	63,000
Interior Grant-in-Aid						
1. Education & Culture						
Department of Education	6,082,000	6,785,000	7,271,000	+486,000	6,400,000	871,000
Museum & Arts Council	9,000	30,000	31,000	+ 1,000	-0-	31,000
	6,091,000	6,815,000	7,302,000	+487,000	6,400,000	902,000
2. Health Services						
Department of Medical Services	3,209,000	3,463,000	3,755,000	+292,000	3,300,000	455,000
3. Economic Development						
Department of Agriculture	516,000	629,000	640,000	+11,000	-0-	640,000
Development Planning Office	73,000	85,000	74,000	-11,000	-0-	74,000
Office of Marine Resources	61,000	11,000	61,000	+50,000	-0-	61,000
	650,000	725,000	775,000	+50,000	-0-	775,000
4. Transportation, Communications & Power						
Department of Port Administration	665,000	883,000	260,000	-623,000	-0-	260,000
Marine Railway	10,000	53,000	-0-	- 53,000	-0-	-0-
Communications Office	304,000	23,000	-0-	- 23,000	-0-	-0-
Electric Utility	7,000	39,000	-0-	- 39,000	-0-	-0-
	986,000	998,000	260,000	-738,000	-0-	260,000

GOVERNMENT OF AMERICAN SAMOA
PROGRAM DISTRIBUTION SUMMARY[1]

	Approved FY 1973	Approved FY 1974	Proposed FY 1975	Over (+) Or Under (-) FY 1974	Sources of FY 1975 Funds: Interior Budget Authority	Sources of FY 1975 Funds: Local Revenue Approp.
5. General Government						
Department of Administrative Services	1,131,000	1,750,000[2]	1,921,000	+171,000	1,921,000	-0-
Audit Office	51,000	78,000	82,000	+ 4,000	-0-	82,000
Department of Legal Affairs	275,000	296,000	327,000	+ 31,000	327,000	-0-
Legislature	562,000	774,000	784,000	+ 10,000	-0-	784,000
Local Government	223,000	229,000	228,000	- 1,000	-0-	228,000
Local Judicial	48,000	60,000	60,000	-0-	-0-	60,000
Department of Manpower Resources	288,000	333,000	298,000	- 35,000	-0-	298,000
Public Defender's Office	39,000	42,000	59,000	+ 17,000	-0-	59,000
Department of Public Works	2,160,000	3,358,000[3]	3,559,000	+201,000	1,376,000	2,183,000
Office of Samoan Information	142,000	195,000	107,000	- 88,000	-0-	107,000
	4,919,000	7,115,000	7,425,000	+310,000	3,624,000	3,801,000
6. Public Safety						
Department of Public Safety	762,000	938,000	1,033,000	+ 95,000	-0-	1,033,000
7. Capital Improvements	7,593,000	5,909,000	8,386,000	+2,477,000	-0-	8,386,000
8. Added Capitalization-Development Loan Fund	-0-	750,000	750,000	-0-	-0-	750,000
9. Grant Match Fund	576,000	1,323,000	1,100,000	-223,000	-0-	1,100,000
TOTALS	25,398,000	28,670,000	31,525,000	+2,855,000	14,000,000	17,525,000[4]

1/ Distributions do not include Federal grants funds other than the DOI grant-in-aid
2/ Includes $114,000 transferred from CIP appropriations to budget directly activities previously financed by overhead charges to construction projects
3/ Includes $709,000 transferred from CIP appropriations to budget directly activities previously financed by overhead charges to construction projects
4/ Local Appropriations approved in principle; actual legislation not yet enacted

GOVERNMENT OF AMERICAN SAMOA
ANALYSIS OF INTERIOR BUDGET AUTHORITY
F.Y. 1974 and 1975

	FY 1974	FY 1975	Increase (+) or Decrease (-) over FY 1974
Direct Appropriations			
Governor's Office	$284,000	$320,000	$+36,000
Chief Justice & High Court	272,000	356,000	+84,000
Total	556,000	676,000	+120,000
Grants - Operations:			
Department of Education	6,000,000	6,400,000	+400,000
Medical Services	3,000,000	3,300,000	+200,000
Legal Affairs	200,000	327,000	+127,000
Manpower Resources	147,000	-0-	-147,000
Public Works	-0-	1,376,000	+1,376,000
Administrative Services	1,426,000	1,921,000	+495,000
Sub-Total	10,873,000	13,324,000	+2,451,000
Grants - Construction:			
Education Facilities	721,000	-0-	-721,000
Health Facilities	1,200,000	-0-	-1,200,000
Transportation, Communications, and Power	350,000	-0-	-350,000
Advance Planning; A&E Design	300,000	-0-	-300,000
Sub-Total	2,571,000	-0-	-2,571,000
Total Direct	556,000	676,000	+120,000
Total Grants	13,444,000	13,324,000	-120,000
Total Interior Budget Authority	14,000,000	14,000,000	-0-

GOVERNMENT OF AMERICAN SAMOA
INTERIOR BUDGET AUTHORITY
SUMMARY OF USE OF FUNDS

	Approved FY 1973	Approved FY 1974	Proposed FY 1975
OPERATIONS:			
Education & Culture			
Education	5,620,000	6,000,000	6,400,000
Health Services			
Medical Services	1,123,000	3,100,000	3,300,000
Economic Development			
Agriculture	200,000	-0-	-0-
General Government			
Governor's Office	272,000	284,000	320,000
Judiciary	248,000	272,000	356,000
Administrative Services	372,000	1,426,000	1,921,000
Audit Office	36,000	-0-	-0-
Legal Affairs	90,000	200,000	327,000
Manpower Resources	100,000	147,000	-0-
Public Works	1,810,000	-0-	1,376,000
Public Safety			
Public Safety	583,000	-0-	-0-
Total-Operations	10,454,000	11,429,000	14,000,000
CAPITAL IMPROVEMENTS			
Education & Cultural Facilities	649,000	721,000	-0-
Health Facilities	1,040,000	1,200,000	-0-
Economic Development	50,000	-0-	-0-
Conservation & Environment	120,000	-0-	-0-
Trans., Communications, Power	2,300,000	350,000	-0-
General Government	32,000	-0-	-0-
Public Safety	385,000	-0-	-0-
Advance Planning; A&E Design	-0-	300,000	-0-
Totals-Capital Improvements	4,576,000	2,571,000	-0-
Totals-All GAS	15,030,000	14,000,000	14,000,000

GOVERNOR'S OFFICE

FY 1974 $284 thousand; FY 1975 $320 thousand; Increase $36 thousand. This activity is financed jointly by Interior Budget Authority and local appropriations as shown below:

	Approved FY 1974	Proposed FY 1975	Increase (+) Decrease (-)
Interior Budget Authority*	284,000	320,000	+36,000
Local Basic Appropriation	35,000	63,000	+28,000
Local Excess Revenues Appropriations	30,000	-0-	-30,000
Totals	349,000	383,000	+34,000

(*Direct Congressional Appropriation)

The net increase of $34 thousand over FY 1974 consists of:

Increase (+) or Decrease (-)

Category	Amount	Position	Total Program	Total Position	Explanation
(1)	+24,000	-1 USCS +1 USCS +1 Local -1 Contr.	283,000	5 USCS 12 Local	Addition of 2 new positions & normal step increases
(2)	+ 5,000		40,000		Home leave travel for USCS employees & official trips to U.S.
(3)	- 5,000		19,000		Cost of services for Constitutional Revision Committee ended in FY 1974.
(4)	-0-		2,000		No change
(5)	+ 4,000		14,000		Increased use of office supplies, machine supplies & postage.
(6)	+ 6,000		25,000		Increased usage of motor pool & communications based on actual FY1973 expenditures.
	34,000	-1 USCS +1 USCS +1 Local -1 Contr.	383,000	5 USCS 12 Local	

Explanation of Changes

(1) Personal Services; $24 thousand increase

A Samoan Management Intern who is serving in the Department of the Interior, Office of the Territorial Affairs in Washington, D. C. is budgeted for the

first time in the basic budget at $13 thousand. This position was first established in the Governor's Office in FY1973 and funded by local excess revenue appropriation in FY1974. The ecologist position is transferred from direct appropriation to funding by an EPA Federal grant in FY1975. An assistant to the Governor for financial management is budgeted for the first time in FY 1975. This position is filled by a US Civil Service employee of the Agency for International Development and is 25% funded by AID. One GS-4 USCS Secretary position budgeted in FY1974 is dropped in FY1975. Normal step increases make up the remainder of the requirement for personnel services budget.

(2) Travel; $5 thousand increase: Increased travel is due to increase in staff including travel for the management intern program, official trips to the United States and other areas of the South Pacific and home leave cost for U.S. Civil Service employees.

(3) Contractual Services; $5 thousand decrease: Decrease is due to the completion of delegate per diem & cost of clerical services for the committee appointed in FY 1973 to recommend revisions to the Constitution of the Government of American Samoa. The committee completed its work in FY1974.

(4) Equipment (Small Capital Items); no change: Normal equipment replacement only in FY1975.

(5) Materials & Supplies; $4 thousand increase: Materials and Supplies were underbudgeted in prior years. Estimate is based on actual expenditures in FY1973. Additional supplies and maintenance materials for a new photocopy machine acquired in FY1974.

(6) All Other Costs; $6 thousand increase: Items requiring increases in this category includes $1 thousand for transportation of things, $2 thousand for printing, $1 thousand for telephone and communication costs, and $2 thousand for motor pool. Except for transportation of things, all other items were underbudgeted in Fiscal Year 1973. Estimates are based on actual cost.

Governor's Office Program

Activity	Approved FY 1974	Estimate FY 1975	Increase(+) Decrease(-)
a. Executive	299,000	353,000	+54,000
b. Veterans Affairs Office	22,000	21,000	- 1,000
c. Boards & Commissions	19,000	9,000	-10,000
d. Constitutional Revision Comm.	9,000	-0-	- 9,000
Totals	349,000	383,000	+34,000

Th cbjective of the Governor's Office is to provide executive direction over the planning, organization, and control of all GAS functions to insure that public services are provided in the most efficient manner possible.

a. Executive

A total of $353 thousand is needed for FY1975, an increase of $54 thousand, or 18% over FY1974.

This activity is responsible for providing executive leadership, establishing policies, administering and coordinating all operations of the Executive branch of the Government of American Samoa. A management intern program was initiated in 1973 with the assistance of the Office of Territorial Affairs in Washington D. C. to send a samoan to work in the Department of the Interior on an annual basis. The program is to provide an opportunity to acquaint Samoans with procedures of the Federal Government. It is planned to continue this program into FY 1975.

b. Veteran Affairs Office

A total of $21 thousand is needed for this activity in FY 1975, a decrease of $1 thousand or 5% under FY 1974.

This activity was established in later FY 1972 to handle all affairs pertaining to Veterans in American Samoa. This includes assisting veterans, veterans widows and veterans orphans applying for benefit checks; visiting disabled veterans, arranging burial for deceased veterans and informing veterans of their rights on current and latest Federal legislation.

c. Boards and Commissions

A total of $9 thousand is needed for this activity in FY 1975, a decrease of $10 thousand or 53% under FY 1974.

Executive Boards and Commissions function to help decide issues, make inspections, hold hearings, set rules and regulations, and provide information and services for the Government and the public. Specific Boards and Commission which have budget needs are Alcoholic Beverages Control Board, the Land Commission, the Commission on Arts and Humanities and the Beautification Committee.

The decrease in funding required is explained by a non-recurring local appropriation of $4,000 in FY 1974 for the expenses of the Gubernatorial Study Commission. The remaining $6,000 in decrease reflects the fact that this fund was budgeted in excess of actual need in FY 1974.

JUDICIARY (CHIEF JUSTICE & HIGH COURT)

FY 1974 $272 thousand; FY 1975 $356 thousand; Increase $84 thousand. This activity will be financed solely by the Interior Budget Authority in FY 1975 as shown below:

	Approved FY 1974	Proposed FY 1975	Increase (+) Decrease (-)
Interior Budget Authority*	272,000	356,000	+84,000
Local Excess Revenue Appropriation	13,000	-0-	-13,000
Totals	285,000	356,000	+71,000

(*Direct Congressional Appropriation)

The net increase of $71 thousand over FY 1975 consists of:

Increase (+) or Decrease (-)

Category	Amount	Positions	Total Program	Total Positions	Explanation
(1)	+33,000	+2 Local	241,000	4 USCS 2 Contr. 11 Local	Addition of 2 new positions & regular step increases.
(2)	- 5,000		18,000		Reduction is in line with government policy to reduce travel.
(3)	+37,000		57,000		Increase contractual services for editing & publishing decisions of the H.C. since 1900.
(4)	+ 2,000		8,000		New equipments & updating the law library.
(5)	-0-		4,000		No change
(6)	+ 4,000		28,000		Increased cost of electricity, printing & transportation of household effects.
	+71,000	+2 local	356,000	4 USCS 2 Contract 11 Local	

Note: FY 1974 sub-program allocations for personnel services, travel and miscellaneous expenses do not agree with FY 1974 Budget Justifications because of redistribution of funds among these object classes.

Explanation of Changes

(1) Personal Services; $33 thousand increase

Two additional employees already on the payroll are now budgeted for the first time for $9 thousand. The other $24 thousand will cover regular step increases for existing employees.

(2) Travel; $5 thousand decrease

Only one civil service employee will be eligible for home leave in FY1975 Other travel will cover transportation of contract employees to Samoa and back to place of recruitment on a one-year contract. Amount of travel budgeted is decreased to a minimum in line with a GAS policy to reduce travel.

(3) Contractual Services; $37 thousand increase

For the first time decisions of the High Court of American Samoa will be published for public references and will be preserved as a part of Samoan history. Preparation and publishing of the first three volumes will cost $44 thousand. At the end of FY 1976 all opinions of the High Court should be in digest form for 1900 through 1976. Other services include building maintenance, pest control, janitorial services, and maintenance of office equipment.

(4) Equipment; $2 thousand increase

Extensive remodelling of the Court House will take place in FY 1974. New equipment will be purchased as the need arises. Also a continuing program to add to and update the law library in the Court House is planned.

(5) Materials & Supplies, no change

No increase in materials and supplies is anticipated in FY 1975.

(6) All Other Cost; $4 thousand increase

Electric Utility cost will increase by $1 thousand due to increase in space of office renovation; cost of transportation of household effects for contract employees after one year contract will increase by $1 thousand; printing of Rules of Court, Rules of Discipline, newsletters, etc. will account for $2 thousand increase. Other miscellaneous items require the same level as FY 1974.

Judiciary Program

The objective of the Judiciary:

To provide for the efficient and orderly conduct of the judicial system and the continuing improvement of the administration of justice in American Samoa.

This activity is responsible for the administration of all elements of the judicial system in American Samoa. The judicial system of American Samoa consists of the High Court and Village courts established to handle law enforcement particularly to deal with juvenile offenders. The High Court has jurisdiction within the entire Territory including Civil, Criminal, Appellate, Lands and Titles, Traffic and small claims.

The Court Divisions and their respective cases handled are as follows:

Trial Division - Criminal and civil cases.

Land & Titles Division - Land cases, high title (Matai or Chief) cases.

Appellate Division - Hears appeals from criminal, civil, and lands & title cases.

Traffic Court - Traffic cases.

Village Courts - Through village Magistrates, rules and law set down by the village councils and enforced by the village courts.

Probate Division - The probate of wills and intestacy proceedings, the appointment of legal guardian for incompetents or minors; the appointment of trustees.

Probation Officer - Serves in dual role of probation officer and of pre-sentence investigation officer.

The actual and estimated case loads are as follows:

	Actual FY1973	Estimate FY1974	Estimate FY1975	FY74-75 % Change
Civil and Land & Title Cases	900	1,250	1,700	+36%
Appellate Cases	90	130	175	+35%
Probate Cases	10	12	15	+25%
Juvenile Cases	15	25	40	+60%
Traffic Cases	3,000	4,500	6,000	+33%
Small Claims	125	150	200	+33%

EDUCATION DEPARTMENT

FY 1974 $6,000 thousand; FY 1975 $6,400 thousand; increase $400 thousand. This activity is financed jointly by Interior Budget Authority and local revenues as shown below:

	Approved FY1974	Proposed FY1975	Increase (+) Decrease (-)
Interior Budget Authority	6,000,000	6,400,000	+400,000
Local Basic Appropriation	495,000	871,000	+376,000
Local Excess Revenues Appropriations	290,000	-0-	-290,000
Totals	6,785,000	7,271,000	+486,000

The increase of $486 thousand net from FY 1974 consists of:

Increase (+) or Decrease (-)

Category	Amount	Positions	Total Programs	Total Positions	Explanation
(1)	+350,000	-6 Contr. +16 Local	5,299,000	72 Contr. 994 Local	Normal salary increase.
(2)	- 15,000		95,000		Less travel due to decrease in new contract employees.
(3)	+ 22,000		229,000		Increase funding for U. of Hawaii contract.
(4)	+ 28,000		228,000		TV equipment replacement.
(5)	+ 4,000		646,000		Increased materials & supplies.
(6)	+ 97,000		844,000		Maintenance, moving expense, & alterations -new Community College
	+486,000	-6 Contr. 16 Local	7,271,000	72 Contr. 994 Local	

Explanation of Changes

(1) Personal Services: $350 thousand increase: Normal salary increments, plus upward restructing of Department of Education wage scales effective July 1, 1973 and partially financed in FY 1974 by an excess local revenue appropriation. Cost of added local hire personnel offset by decrease in contract employees.

(2) Travel; $15 thousand decrease: Significant decreases in the number of new contract employees to be added in FY1975 cuts the need for employee travel costs in the Business Office, TV Engineering, Community College & Secondary Education Office. Travel costs are also reduced by an Executive policy announced in FY'74 requiring better justification for all travel.

(3) Contractual Services; $22 thousand increase: The normal increase in contract services for maintenance of office equipment is offset by decreases in cost of contract services for maintenance of school facilities & classroom furniture. These are now fully budgeted services provided by the Public Works Department and by the Department of Education maintenance staff respectively. The Major increases in contract services are caused by an increase of $5,000 in the appropriation funding for a continuing contract with the University of Hawaii for consultant services, and increases in costs of TV engineering by $+9,000, rental of films for evening TV by $+3,000 and IBM equipment rented by the Community College $+6,000.

(4) Equipment; $28 thousand increase: An increase of $81,000 for TV transmitter and studio equipment is partially offset by decreases in equipment requirements for elementary & secondary schools, since fewer new schools will open in FY1975.

(5) Material and Supplies; $4 thousand increase: Increase due to requirement for more supplies and textbooks for growing student population. Added janitorial supplies are also needed for additional school facilities.

(6) All Other Costs; $97 thousand increase: The large increase is primarily due to the anticipated purchase of Mapusaga High School from the LDS Church for use as the new Community College. Approximately $150,000 is needed for maintenance of the facilities and campus, costs of moving equipment and supplies to the new campus, and minor alterations to the facilities. Reductions in other miscellaneous needs partially offset the increase.

Education Programs

	Approved FY1974	Proposed FY1975	Increase (+) Decrease (-)
a. Administration	193,000	202,000	+ 9,000
b. Business Services	136,000	72,000	- 64,000
c. Maintenance	27,000	22,000	- 5,000
d. Warehouse	26,000	26,000	-0-
e. Television Services	1,690,000	1,809,000	+119,000
f. Community College	524,000	718,000	+194,000
g. Early Childhood Education	265,000	278,000	+ 13,000
h. Elementary Instruction	1,895,000	1,990,000	+ 95,000
i. Secondary Instruction	886,000	939,000	+ 53,000
j. Support Services	937,000	1,011,000	+ 74,000
k. Publications	70,000	62,000	- 80,000
l. Transportation	136,000	142,000	+ 6,000
Totals	6,785,000	7,271,000	+486,000

The objective of the Department of Education is to assist each person to reach his fullest potential as a unique individual. $7,271 thousand is needed in FY1975 for operations, a 7% increase over FY 1974.

a. Administration

A total of $202 thousand is required for Education Administration, an increase of $9 thousand, or 5% over FY'74.

The responsibility of this activity is coordination and administration of the entire public school system. The increase in this activity is for contractual services with the University of Hawaii for teacher inservice training, plus air fare to the U. S. mainland for an estimated 10 high school students on National Science Foundation student scholarships.

b. Business Services

A total of $72 thousand is needed for FY 1975, a decrease of $64 thousand, or 4%, under FY 1974.

This activity provides business and administration support services throughout the Department of Education.

The decrease in this activity is explained by the elimination of the Federal Grant Coordinator and three craft positions, reduction in computer services charges, prorating of repairs to air conditioners and office equipment to using accounts, and the elimination of the need for off-island travel.

Representative measures of the workload for this activity are as follows:

Travel requests processed	500
Personnel actiona & level requests processed	5,000
Purchase requests logged & processed	3,500
Certify Invoices for payment	250

c. Maintenance

A total of $22 thousand is required for FY 1975, a decrease of $5 thousand, or 19%, from FY 1974.

This activity is responsible for the maintenance of classroom furniture, school equipment and minor building repairs.

Approximately 300 requests for services are answered annually.

d. Warehouse

A total of $26 thousand is needed for FY 1975, no change from FY 1974.

This activity is responsible for storage, issuance, and delivery of instructional and operational supplies, equipment, and materials for the entire school system.

e. Television Services

A total of $1,809 thousand is required for FY 1975, an increase of $119 thousand, or 7%, over FY 1974.

Television services is composed of the following functions:

1. INSTRUCTIONAL TELEVISION provides instructional resources and professional assistance including teachers' guides, student booklets,

worksheets, a variety of audio-visual learning aids, and telecasts to elementary and secondary schools. The proposed budget is $463 thousand, a 2% increase over FY 1974. The major increase is due primarily to normal salary increases plus an increase in cost of materials and supplies for purchasing films, video tape and printed materials for the Research Library which is available to all schools on the Island.

2. TELEVISION PRODUCTION is responsible for the production of all locally produced television programs, both for the instructional school program and for evening and weekend Community TV.

The proposed budget for this activity in FY 1976 is $430 thousand, an increase of $20 thousand, or 5% over FY 1974. The increase is for normal salary increments.

Selected measure of workload are:

	Actual FY1973	Estimated FY1974	Projected FY1975	FY74-75 % Change
ITV courses in produc.	37	41	43	+5%
CTV program in produc.	9	10	11	+1%
Broadcast hours in produc.	2,208	2,420	2,578	+7%
Photo request compl.	4,055	5,000	6,700	+34%
Graphics request completed	6,210	8,000	10,000	+25%
Hours production per program	1.5	2.0	2.5	+25%

3. TELEVISION ENGINEERING is responsible for the operation and maintenance of all technical equipment utilized in the production and transmission of television programs.

The proposed budget for this activity in FY 1975 is $740 thousand, an increase of $72 thousand, or 11% over FY 1974. The major increase is for replacement of television equipment and for 3 additional positions in FY 1975.

4. COMMUNITY TELEVISION is responsible for producing, purchasing and scheduling all television programs for the community at large i.e. outside the school system. An amount of $178 thousand is required for this activity in FY 1975, an increase of $18 thousand, or 11%, over FY 1974. The primary increase is for personal services, i.e. the adding of the station manager's and secretary's salary which were divided equally among other TV Budgets in FY 1974. Overtime pay is also budgeted for the first time in FY 1975.

f. Community College

A total of $718 thousand is needed for FY 1975, an increase of $194 thousand, or 37% over FY 1974.

This activity is responsible for providing higher educational opportunities in the following areas of education:

1. Adult and continuing education
2. Manpower training, Vocational Education, and Adult Basic Education
3. Teachers pre-service education

4. Inservice teacher education programs, including facilitating the University of Hawaii and Brigham Young University summer programs.
5. A two-year college transfer program
6. Single course and certificate programs to meet the needs of the community.

The increase for FY1975 consists of the normal salary increases, the addition of 4 new positions to manage the anticipated increased student enrollment, and $150,000 for transition of the Community College to new facilities and the maintenance of those new facilities.

Selected measures of the workload are as follows:

	Actual FY1973	Estimated FY1974	Projected FY1975	FY 74-75 % Change
No. of AA Teacher degrees awarded	14	16	20	+25%
Courses offered for Nurses trainees	2	2	2	0
ADP Keypunch operators trained	20	20	20	0
Business Education Courses offered	30	35	40	+14%
Vocational Day Courses offered	15	15	20	+33%
Afternoon and Evening Courses for Semi-Skilled persons	100	125	150	+20%

g. Early Childhood Education

A total of $278 thousand is needed for FY 1975, an increase of $13 thousand, or 5% over FY 1974.

The objective of this activity is to stimulate intellectual development and foster physical, social and emotional growth of Samoan children under the age of 6 by providing learning materials and conducting continuing teacher training for Samoans to staff village ECE centers.

The increase in budget is attributed entirely to wage increases and the addition of one (1) new position required to manage a large enrollment.

h. Elementary Instruction

A total of $1,990 thousand is required for FY 1975, an increase of $95 thousand, or 5% over FY 1974.

This activity is responsible for educating all public school elementary level children and to continually improve ongoing inservice teacher training for professional growth of the teaching staff.

The scope of the elementary schools system is indicated below:

	Actual FY1973	Estimate FY1974	Projected FY1975	FY74-75 % Change
Enrollment	5,931	6,178	6,422	+4%
Number of schools	26	28	28	
Employees	328	359	364	+1%

The increase in enrollment will necessitate 6 additional classroom teachers at a cost of $45 thousand. Normal salary increases and more supplies and materials needs account for the remainder of the total increase.

i. Secondary Instruction

The proposed FY 1975 budget is $939 thousand, an increase of $53 thousand or 6%, over FY 1974.

This activity is responsible for the education of all secondary public school students. The continuing goals of secondary education are to assure greater responsibility in the delivery of instructional programs by classroom teachers, to provide closer supervision and involvement of teachers in curriculum planning, to implement and improve physical education and athletic programs for students, and to provide educational and vocational counseling.

In FY 1975, the majority of the increase consists of normal salary increases, more textbooks in classrooms, and increased amounts of materials and supplies for the growing student population. The student growth is as follows:

	Actual FY1973	Estimated FY1974	Projected FY1975	FY74-75 % Change
High school students	2,114	2,400	2,600	8%
H.S. Graduates	376	450	500	11%

j. Support Services

A total of $1,010 thousand is required for FY 1975, an increase of $173 thousand, or 21%, over FY 1974.

Support Services consist of the following:

1. OFFICE OF TEST AND MEASUREMENT is responsible for assessing the effectiveness of various educational programs and to develop structur tests and other measures that are normed on the Samoan student population. This office further is charged with developing program to construe and better utilize assessment data, of the total $74 thousand budget, $54 thousand will be used for personal services, an increase of $12 thousand or 29%, over FY 1974.

Selected measures of workload are as follows:

	Actual FY1973	Estimated FY1974	Projected FY1975	FY74-75 % Change
General Education Development Test Given	980	1,200	1,440	20%
Entrance Test given (SAT, GRE, etc.)	309	350	420	20%
Nursing Exam given & scored	64	75	75	-0-
Standardized Achievement Tests	40	3,200	3,500	10
Curriculum Referenced Tests	4,878	10,000	11,000	10
Major Summary Research Projects	3	5	10	100

2. LIBRARY SERVICES provides help to both school and public libraries to meet the educational, informational, recreational, and cultural needs of the people of American Samoa. The FY 1975 budget is $191

thousand, an increase of $36 thousand over FY 1974. The major increase is due to normal salary increases and 3 additional positions. Also increases due to shifting of Media Resource Center under Library Services to better provide one source for all materials i.e. print, non-print, and audio visuals to library units and schools. The Media Resource Center activity transfers from federal grants to appropriation budget in FY 1975.

Selected measures are:

	Actual FY1973	Estimated FY1974	Projected FY1975	FY74-75 % Change
Books circulated	54,518	68,000	75,000	+10%
Bookmobile stops	795	850	1,000	+18%
Books acquired	17,612	15,000	18;000	+20%

3. FINANCIAL AID is responsible for awarding scholarships to qualified American Samoans. The FY 1975 budget is $341 thousand, an increase of $12 thousand over FY 1974 to cover normal expense growth. The program was significantly expanded in FY 1974 in response to a resolution of the Legislature and the appropriation of $100 thousand of local excess revenues. Approximately 80 students will benefit from this program.

4. HEALTH, PHYSICAL EDUCATION, AND RECREATION activity is responsible for;

   1. Physical Education in the schools
   2. Competitive athletics in the schools
   3. Community recreation program.

   The proposed budget for this activity in FY 1975 is $72 thousand, an increase of $3 thousand over FY 1974. The increase is in construc-tual services for one professional football and basketball coach to come from Hawaii to conduct sports clinics for athletic directors and local coaches; one track and field and boxing coach from Hawaii to conduct clinics for our sports coaches and recreational leaders and one sports official to conduct officiating clinics for officials and coaches.

5. FOOD SERVICES is responsible for providing hot lunches to 8,600 children and breakfasts to 6,400 children. The total budget needed for FY 1975 is $333 thousand, an increase of $18 thousand over FY 1974, allowing for the salary increments as the only change in the cost of program.

This activity is also supported by additional funds & commodities, provided by USDA programs under the National School Lunch Act.

k. Publication

A total of $62 thousand is required for FY 1975, a decrease of $8 thousand, or 11% under FY 1974.

The responsibility of this activity is to print, bind and deliver lesson plans and other printed materials for the Department of Education. The decrease of 11% in this activity is in equipment costs.

1. Transportation Services

A total of $142 thousand is needed for FY 1975, an increase of $6 thousand, or 4% over FY 1974.

This activity is responsible for providing safe and economical transportation for children in all the public schools in American Samoa. The increase in this activity is due primarily to wage and salary adjustments and increases.

Selected measures of the workload are as follows:

	Actual FY1973	Estimated FY1974	Projected FY1975	FY74-75 % Change
Students transported per day	5,850	5,890	6,000	+2%
Special trips per month	40	40	60	+20%

HEALTH SERVICES

In FY 1974 $3,100 thousand; FY 1975 $3,300 thousand; increase $200 thousand. This activity is funded jointly by Interior Budget Authority and local revenues as indicated below:

	Approved FY 1974	Proposed FY 1975	Increase (+) Decrease (-)
Interior Budget Authority	3,100,000	3,300,000	+200,000
Local Basic Appropriation	67,000	455,000	+388,000.
Local Excess Revenue Appropriations	296,000	-0-	-296,000
Total	3,463,000	3,755,000	+292,000

The substantial net increase of $322 thousand or 9% above FY 1974 consists of:

Increase (+) or Decrease (-)

Category	Amount	Positions	Total Program	Total Positions	Explanation
(1)	+192,000	+2 Contr. +8 Local	2,792,000	31 Contr. 401 Local	Salary increases and 10 new positions.
(2)	- 1,000		53,000		Reduced travel requirement.
(3)	+ 24,000		85,000		Increased cost of Off-Island Care & maintenance of equipment.
(4)	- 1,000		5,000		No major equipment requirements
(5)	+ 65,000		644,000		Increased cost of drugs & medical supplies.
(6)	+ 13,000		176,000		Increased transport of household goods & utilities.
	+292,000	+2 Contr. +8 Local	3,755,000	31 Contr. 401 Local	

Explanation of Changes

1. Personal Services; $192 thousand increase: Normal salary increments, plus eleven additional positions projected for FY 1975. These new positions are: one bacteriologist and one lab technician to man the Public Health laboratory to handle both the hospital and Public Health bacteriology work. One dental lab technician to do lab work and free the dentists to spend more time with the patients; one hospital engineer to direct and supervise the maintenance program of medical equipment and buildings; two RNs to supervise the medical and surgical services; one associate pharmacists position; two sanitation officers to check incoming passengers at the airport; one sanitation officer trainee to expand sanitary inspection of Manu'a; one library technician to staff the new medical library. The deletion of the pathologist position will off-set one of the additional positions requeste
2. Travel, $1 thousand decrease: Decrease in travel due to the fact that several Divisions of the Department project less need for travel to the United States or the Pacific Islands in FY 1975.
3. Contractual Services; $24 thousand increase: Increases in cost of the Off-Island Care Program. This program was created by GAS and instituted as policy for several years to provide off-island medical care for American Nationals and citizens residing in American Samoa whenever adequate facilities for treatment were not available. The cost includes in the program all hospitalization and care as well as any attendant medical costs that are necessary for the patients' well being. Also the cost of repairs and maintenance of office equipment has increased with increasing numbers of equipment items.
5. Materials and Supplies; $65 thousand increase: It is anticipated that the cost of drugs will be greatly increased in FY 1975 and therefore requires additional funds. More supplies are also required to serve the increasing number of facilities when the new Public Health laboratory, chapel, and medical library are completed by FY 1975.
6. Miscellaneous; $13 thousand increase: The increase is due primarily to transportation costs of shipping household effects of contract employees who will terminate their contract in FY 1975 and their replacements. Also anticipates growth in leasing of motor pool vehicles for the departmental use.

MEDICAL SERVICES PROGRAM

Activity	Approved FY 1974	Proposed FY 1975	Increase (+) Decrease (-)
Director's Office	481,000	483,000	+ 2,000
Pharmacy	232,000	275,000	+43,000
Laboratory	104,000	123,000	+19,000
Radiology	74,000	70,000	- 4,000
Dental	120,000	159,000	+39,000
Laundry	55,000	54,000	- 1,000
Housekeeping	85,000	85,000	-0-
Nursing Services	796,000	854,000	+58,000
Nursing Education	106,000	112,000	+ 6,000
Medical & Surgical	644,000	693,000	+49,000
Food Services	193,000	204,000	+11,000
Public Health	353,000	381,000	+28,000
Sanitation	94,000	100,000	+ 6,000
Hospital Maintenance	126,000	162,000	+36,000
	3,463,000	3,755,000	+292,000

The Objective of Medical Services

To provide the best possible preventive and curative medical services to the people of American Samoa within the constraints of manpower and means.

Director's Office

A total of $483 thousand is needed for FY 1975, an increase of $2 thousand, over FY 1974.

This activity is responsible for the entire management and supervision of all aspects of health services including planning and direction, budget and finance, personnel administration, purchasing, medical supply, medical records, business services, drivers, and guards.

The increase in this activity is due primarily to personal services i.e. wage adjustments and one added local hire employee. Also added supplies, materials and equipment.

Pharmacy

A total of $275 thousand is needed for FY 1975, an increase of $43 thousand or 23% over FY 1974.

This activity is responsible for compounding and dispensing all drugs and pharmaceutical preparations in the hospital for inpatient medications and outpatient prescriptions. It also issues pharmacy-manufactured items to eight Public Health dispensaries in Tutuila, Manu'a, Aunu'u, and Swains Island. Additionally, it sells non-prescription items to the public.

The substantial increase is due upward salary adjustments and one added local hire associate pharmacist. The cost of drugs is increased 22% over FY 1974.

Laboratory

A total of $123 thousand is needed for FY 1975, an increase of $19 thousand or 18% over FY 1974.

This Division performs tests in order to assist the medical staff in making or confirming diagnoses. In FY 1973, this section performed 153,482 tests. It is projected in 1975, that a total of 170,000 tests will be conducted.

The increase of 18% in this activity is due primarily to the addition of one contract bacteriologist and a lab technician in FY 1975. An increase of $4,500 in contractual services with the Pathology Associate-Honolulu, will cover the expected increase in the number of pathology specimens to be analysed.

Radiology

A total of $70 thousand is needed for FY 1975, a decrease of $4 thousand or 6% under FY 1974.

This activity provides diagnostic radiology services required in examination, care and treatment of patients. It also takes chest x-rays for all GAS pre-employment, annual check-ups for food handlers, aliens traveling overseas, and all tests for public health reasons.

Personal services were overbudgeted in FY 1974. A small workload increase of 5% above FY 1974 is anticipated to bring the number of x-ray films taken to approximately 37,000.

Dental Services

A total of $159 thousand is requested for FY 1975, an increase of $39 thousand or 32% over FY 1974.

This activity is responsible for maintaining and improving the dental health of the people of American Samoa, contract personnel and aliens. Provisions are made for all types of dental care except advanced orthodontic treatment and open reduction of facial fractures. 12,250 Dental visits are anticipated.

Additional responsibilities include planning, coordinating and implementing the School Dental Health program financed jointly by federal grant funds of the Comprehensive Health Planning Program and Department of the Interior grant-in-aid.

Laundry

A total of $54 thousand is needed for FY 1975, a decrease of $1 thousand, below FY 1974.

This activity is responsible for collection and laundering of hospital linens and garments. It also sells laundry services to other government and private entities. The decrease reflects a reduction of staff by three laundry workers. This was initiated when the Americana Hotel began processing its own laundry. Approximately 570,000 pieces of laundry will be processed.

Housekeeping

A total of $85 thousand is needed. This is the same funding as FY 1974.

This Division is responsible for maintaining the hospital and public health facilities in a clean, sanitary and attractive condition as essential to medical and nursing care of patients. Regularly scheduled cleaning program are maintained throughout the Medical Services complex. Patient care areas, intensive care units, surgical suits, and other specialized areas require an especially high level of snaitation and sterilization.

Two shifts provide services to the medical complex from 7:00 a.m. to 12:00 midnight, seven days a week and including holidays. Supplies and materials will increase by $3 thousand due to additional facilities to be cleaned in FY 1975. These are the chapel, new public health office building, public health lab, OB-GYN clinic, library, and medical supply bulk storage. These new facilities will be constructed with Hill-Burton funding and will increase the total health facilities to 129,000 sq. ft.

Food Services

A total of $204 thousand is needed for FY 1975, an increase of $11 thousand, or 6%, over FY 1974.

This Division plans, prepares and serves nutritious and appetizing food for patients and hospital personnel. It also provides special diets essential to treatment of patients under the direction of the medical staff. They will prepare and serve 140 thousand regular, 31 thousand special diets, and 125 thousand snacks in FY 1975. The present staff is considered adequate to handle the anticipated increase, but an additional $24 thousand is needed for additional supplies and materials.

Hospital Maintenance

A total of $162 thousand is needed for FY 1975, an increase of $36 thousand, 21%, over FY 1974.

This Division is responsible for maintenance of buildings, grounds, and equipment. It is also responsible for upkeep of the dispensaries. The majority of increase is for normal salary increases, and the addition of one new contract employee. A $6 thousand increase in supplies and materials is also required.

Nursing Education

A total of $112 thousand is needed for FY 1975, an increase of $6 thousand, or 6%, over FY 1974.

Nursing Education provides professional education for student nurses.

Forty-six students will be trained in FY 1975. The present staff is adequate to provide the desired faculty/student ratio of 1 to 6. The increase in personal service costs is due to annual wage increments.

Medical & Surgical

A total of $693 thousand is required for FY 1975, an increase of $49 thousand, or 8% over FY 1974.

This activity supports all doctors plus one surgical technician. It also funds all off-island medical care. Off-island care is provided at Tripler Army Medical Center, Honolulu, under an agreement with the U. S. Army which provides these services at a low cost to the GAS.

No added staff are requested. The pathologist position will be deleted in FY1975 The increase in cost reflects normal salary increases and an additional $20,000 for off-island medical services.
Indicators of workload are as follows:

	Actual FY1973	Estimated FY1974	Projected FY1975	FY74-75 % Change
Outpatient visits	116,120	125,000	131,000	+5%
Discharge patient days	33,348	34,700	35,500	+2%

Public Health

A total of $381 thousand is needed for FY 1975, an increase of $28 thousand, or 8% over FY 1974.

This activity provides preventative health services and health education. The majority of the increase is for normal salary increments and two additional clerk-typists which were budgeted under federal grants in FY 1974.

Selected workload measures are:

	Actual FY1973	Estimated FY1974	Projected FY1975	FY74-75 % Change
No. of treatment given by PH nurses	120,000	126,000	150,000	+19%
No. of birth attended	26	10	5	-50%
No. of inpatients cared for	120	130	150	+15%
No. of immunization given	17,000	20,000	35,000	+75%
No. of visits to people at home	21,000	23,000	25,000	+ 9%
No. of treatment and examination of school children	70,000	75,000	80,000	+ 7%

Sanitation

A total of $100 thousand is needed for FY 1975, an increase of $6 thousand, or 6%, over FY 1974.

This activity is responsible for the control of the sanitary condition of the community. Personal services are increased by normal salary increments and two added snaitation officers for the airport. These two officers were previously paid under the airport revolving fund and will transfer to this account in FY 1975. One sanitation officer trainee is also added for sanitary inspections in the Manu'a Islands.

Selected workload measures are:

	Actual FY1973	Estimated FY1974	Projected FY1975	FY74-75 % Change
No. of premises inspected	29,650	31,000	32,000	+3%
Inspections of food establishments	7,682	8,000	8,500	+6%
Ships and aircrafts granted sanitary clearance	2,779	3,000	3,300	+10%
School inspections	1,590	2,000	2,200	+10%
Stray animals caught	1,381	1,500	1,550	+3%
Citations issued	363	400	400	
Building visits for rat control	1,612	2,000	2,200	+10%

ADMINISTRATIVE SERVICES

FY 1974 $1,426 thousand; FY 1975 $1,921 thousand; increase $495 thousand. This activity was funded jointly by Interior Budget Authority and local revenues during FY 1974. FY 1975 program is funded entirely by Interior Budget Authority as shown below:

	Approved FY 1974	Proposed FY 1975	Increase (+) Decrease (-)
Interior Budget Authority	$1,426,000	1,921,000	+495,000
Local Excess Revenue Appropriations	210,000	-0-	-210,000
Transfer from CIP Appropriations 1/	114,000	-0-	-114,000
Total	$1,750,000	1,921,000	+171,000

The net increase of $171 thousand over FY 1974 consists of:

Increase (+) or Decrease (-)

Category	Amount	Positions	Total Program	Total Positions	Explanation
(1)	+159,000	0 USCS 0 Contr. +9 Local	1,390,000	3 USCS 11 Contr. 180 Local	Added staff & normal salary increases
(2)	+ 13,000		49,000		Contract employee turnover, off-island training, & conference travel

1/ To fund activities previously financed by overhead charges against construction projects.

Increase (+) or Decrease (-)

Category	Amount	Positions	Total Program	Total Positions	Explanation
(3)	+ 1,000		25,000		Minor office & storage area renovations
(4)	No change		71,000		Replacement of applicances, household furnishings, office machines, & office equipment to be continued
(5)	- 8,000		82,000		Reduced materials & supplies requirements anticipated
(6)	+ 6,000		304,000		Electricity usage underestimated in prior years
	+171,000	0 USCS 0 Contr. +9 Local	1,921,000	3 USCS 11 Contr. 180 Local	

Explanation of Changes

1. Personal Services; $159 thousand increase: Nine additional local personnel are requested for FY 1975. These positions are as follows:

Staff Accountant
Revenue Clerk
Weights & Measures Inspector
Deputy Procurement Officer
Secretary
Janitor
Budget Aide
Keypunch Operators - 2

Normal salary increases and upgrading of present personnel account for the remainder of the increase over FY 1975.

2. Travel; $13 thousand increase: The majority of the increase in travel is for off-island training for members of the Tax Office and Planning and Budget staff, and travel to stateside conferences and business meetings by the Disbursing Officer, Assistant Disbursing Officer, and the Assistant Director for Material Management. In addition, 3 contract personnel will terminate in FY 1975, and $12,000 is requested for their return travel and travel by their replacements.

3. Contractual Services $1 thousand increase: Contracts with local firms for servicing and maintenance of office equipment and air conditioning will be continued. Minor office and storage area renovations account for the small increase.

4. Equipment; No change: The major portion of the equipment request is for needed replacement of household furnishings and appliances for contract personnel quarters. Twenty-five percent of all appliances were replaced in FY 1973. However, of the remaining seventy-five percent, the majority are over 10 years old. The remainder of the equipment requirement consists of replacement of office machines and equipment such as typewriters, calculators, dictating machines, filing cabinets, desks, chairs, etc.

5. Materials & Supplies; $8 thousand decrease: Based upon actual FY 1973 and estimated FY 1974 expenditures, a reduction in materials & supplies requirements is anticipated for FY 1975.

6. Miscellaneous Items; $6 thousand increase: In FY 1975, an increase of $45,000 for anticipated electricity usage is requested. This item has been underbudgeted in prior years. Forced reductions in other miscellaneous categories offset the majority of this increase.

Administrative Services Program

Activity	Approved FY 1974	Proposed FY 1975	Increase (+) Decrease (-)
a. Administration	256,000	324,000	+ 68,000
b. Treasury Division	499,000	561,000	+ 62,000
c. Material Management	410,000	475,000	+ 65,000
d. Planning & Budget	113,000	124,000	+ 11,000
e. General Services	472,000	437,000	- 35,000
Total	1,750,000	1,921,000	+171,000

The primary objectives of the Department of Administrative Services are as follows:

1. To aid the Governor in developing long range plans for operations and capital improvement programs for the territory, and to formulate and execute the annual budgets.

2. To maintain a financial accounting and information reporting service that is as responsive to the government-wide management needs as it is reasonably possible to provide.

3. To provide for the collection and safeguarding of all government revenues, and for the timely payment of all government liabilities.

4. To procure, store and dispense as required all equipment, supplies, and materials used by the government.

5. To advertize bids, to select contractors and to establish, and monitor all contracts for goods, services, land leases for the government.

6. To insure consumer protection in accordance with the territorial weights and measures legislation.

7. To maintain the public records, issue licenses and record vital statistics.

8. To manage all government general use facilities, and housing, to maintain accountability for all capital equipment and to maintain the central records of the government.

9. To provide efficient and responsive general services to all government agencies including mail services, automatic data processing and printing.

10. To operate the governor's house and the territorial liquor store.

a. Administration

A total of $324 thousand is needed for FY 1975, an increase of $68 thousand, or 27% over FY 1974.

This activity is responsible for the overall management and supervision of all divisions of the Department of Administrative Services. In addition, it is responsible for the administration of contracts and the following business type activities which are operated as revolving funds:

(1) General Supply
(2) Print Shop
(3) Territorial Liquor Store

All electricity usage by the Department and for all contract employee housing is budgeted under this activity. In prior years, this item has been underbudgeted. An increase of $45,000 for electricity costs is requested for FY 1975. No additional personnel are requested.

b. Treasury Division

A total of $561 thousand is needed for FY 1975, an increase of $62 thousand, or 12%, over FY 1974.

The Treasury Division is responsible for the following functions:

(1) Comptroller
(2) General Accounting (including Grant & Retirement Accounting)
(3) Cost Accounting
(4) Disbursing
(5) Revenue Collection
(6) Weights & Measures

In FY 1975, the emphasis will be on improvement of GAS financial systems and further implementation of computerized programs for appropriations accounting, construction cost accounting, obligations, payroll, and accounts payable. Three additional personnel are requested for FY 1975. These are a staff accountant, a revenue clerk, and a weights & measures inspector. Normal salary increases and upgrading of present personnel account for the remainder of the increase over FY 1974.

c. Material Management

A total of $475 thousand is needed for FY 1975, an increase of $65 thousand, or 16% over FY 1974.

This activity is responsible for the following functions:

(1) Procurement
(2) Housing
(3) Property Management
(4) Records Management
(5) Facilities Management
(6) Support Services

Beginning in FY 1975, increased emphasis will be placed upon the following:

1. To establish facilities and train personnel to effectively carry out all division goals by an all-Samoan staff by the end of FY 1977.

2. Phase out USCS management of the division by the end of FY'77.

3. Design, construct and phase into operation a completely new supply warehouse complex by the end of FY'77.

4. Provide an intensive on and off-island training program for the Samoan staff in FY'75 and FY'76.

5. To establish and implement a complete new set of procurement and supply operational policies and procedures by the end of FY'76.

6. To plan, design, and construct 60 replacement housing units by the end of FY'76 and gradually replace furniture and appliances over 6 years old for an additional 80 housing units during the same period.

7. Over a five-year period up-grade through replacement out-moded or economically marginal print shop equipment.

8. Implement a detailed Records Management and Storage Program for the government by the end of FY'79 with a start-up in FY'75.

9. Begin detailed planning for construction of major replacement in government office space to be implemented prior to the end of FY'78.

10. Lease the Territorial Liquor Store to a concession operator by the end of FY'75

11. Encourage and aid local merchants to offer all those general supply items now presently sold only by the government to the private sector.

12. Continue in FY'75, a program begun in FY'74 to convert all supply inventory and stock control to automatic data processing with an "all-up" system targeted for mid'year of FY 1976.

Three additional personnel are requested for FY 1975. These are a Deputy Procurement Officer, a secretary, and a janitor. $40,000 is requested for needed replacement of household furnishings and appliances for contract quarters. Normal salary increases and upgrading of present personnel account for the remainder of the increase over FY 1974.

d. Planning and Budget

A total of $124 thousand is needed for FY 1975, an increase of $11 thousand or 10% over FY 1974.

1. Greater emphasis will be placed on offering government-wide training in management concepts. Management seminars will be conducted with emphasis on goal setting, long range planning, and the use of developed plans and budgets as management tools.

2. Continue attempts to seek adoption of a budget law for the territory.

3. Review & update Executive policies and procedures governing the preparation of planning documents and budgets and seek incorporation of these in the GAS administrative manual.

4. Continue development of a management information system for use by top management.

5. Seek professional level training in planning and budget preparation for three local hire Budget Analysts.

One additional position, a Budget Aide, is requested for FY 1975. An increase of $3,000 in travel funds is requested to permit travel for professional training of staff members, and to enable travel to neighbor islands for comparative research on approaches to common problems faced by island governments. Normal salary increases and computer processing time account for the remainder of the increases over FY 1974.

e. General Services

A total of $437 thousand is requested for FY 1975, a decrease of $35 thousand or 7% from FY 1974.

The general services activity consists of the Data Processing Center which serves all government activities, the Territorial Registrar's Office, the Tax Office, and the management of the Executive House operation. In FY 1974, in order to meet the increased workload, the Data Processing will purchase additional equipment at a cost of approximately $35,000. This being a non-recurring item and therefore not a requirement for FY 1975 constitutes the primary reason for the decrease in the general services activity from FY 1974. Two additional keypunch operators are requested by the Data Processing Center, and travel for off-island training, Stateside tax audits, and IRS conferences by the Tax Office staff will increase by $4,500. Anticipated reductions on lease payments for EDP equipment will offset these increases.

LEGAL AFFAIRS

FY 1974 $200 thousand; FY 1975 $327 thousand; increase $127 thousand. This activity is financed solely by Interior Budget Authority in FY 1975 as shown below:

	Approved FY 1974	Proposed FY 1975	Increase(+) Decrease(-)
Interior Budget Authority	200,000	327,000	+127,000
Local Basic Appropriation	82,000	-0-	- 82,000
Local Excess Revenues Appropriations	14,000	-0-	- 14,000
Total	296,000	327,000	+ 31,000

The net increase of $31,000 from FY 1974 consists of:

Increase (+) or Decrease (-)

Category	Amount	Positions	Total Programs	Total Positions	Explanation
1	+21,000	-1 Contr. +4 Local	274,000	3 Contr. 35 Local	Normal salary increases, & 3 additional positions.
2	+ 4,000		13,000		Travel for termination of 2 contract employees, 1 replacement, plus mainland training.
3	+ 2,000		3,000		Repairs & maintenance of office & duplicating equipment.
4	- 2,000		5,000		Normal replacements of typewriters & airconditioners.
5	- 2,000		12,000		Overbudgeted supplies in FY 1974.
6	+ 8,000		23,000		Added transportation of things, printing of forms & motor pool use.
	+31,000	-1 Contr. +4 Local	327,000	3 Contr. 35 Local	

Explanation of Changes

1. Personal Services; $21 thousand increase: Normal salary increases, increased fringe benefits, and three additional local personnel. The incumbent Deputy Attorney General will terminate in FY 1975 and the position will again be filled by an attorney from the mainland since no local hire attorney is expected be possess the requisite experience for this position. The 3 additional local personnel are needed to bring immigration staff to an adequate level. Annual salary adjustments account for the remaining portion of the increase.

2. Travel; $4 thousand increase: Increase due to termination of contract personnel anticipated in FY 1975. Majority of travel funds are for termination of two assistant attorneys general whose contracts expire in FY 1975 and for the recruitment of a Deputy Assistant Attorney General from the mainland. It is also planned to send a recent law graduate to the mainland for training in the fields of criminal law, environmental law, contracts law, and to familiarize him with the DOI Solicitor's Office. Additional travel is also required to send the passport and visa personnel to the mainland for training.

3. Contract Services; $2 thousand increase: Increase in contracts with outside parties for repairs and maintenance of office equipment.

4. Equipment; $1 thousand increase: Decrease is due to less anticipated replacement of office equipment in FY 1975.

5. Materials & Supplies; $2 thousand decrease: This item was overbudgeted in FY 1974.

6. Miscellaneous; $9 thousand increase: Increase is due to transportation of household goods for 2 contract employees whose contracts expire in FY 1975 and for the same purpose for a replacement of Deputy Attorneys General.

LEGAL AFFAIRS PROGRAM

Activity	Approved FY 1974	Proposed FY 1975	Increase (+) Decrease (-)
Attorney General	146,000	171,000	+25,000
Immigration	150,000	156,000	6,251
Total	296,000	327,000	+31,000

1. Attorney General's Office

A total of $171 thousand is needed for FY 1975, an increase of $25 thousand or 17% over FY 1974.

This activity is responsible for rendering legal advice to all departments, boards, and agencies of the Government of American Samoa and is responsible for prosecution of all criminal cases. This activity is staffed by the Attorney General, a Deputy, 2 Assistant Attorneys General, a legal aid, 4 secretaries, and a janitor.

Workload measures are as follows:

	Actual FY1973	Estimate FY1974	Estimate FY1975	FY74-75 %Change
No. of cases (criminal)	217	250	300	+20%
No. of cases (civil)	15	20	30	+50%
Volume of Correspondence	2,000	2,500	3,000	+20%
Volume of legal documents	150	200	250	+25%

2. Immigration Division

A total of $156 thousand is needed for FY 1975, an increase of $6 thousand or 4%, over FY 1974.

This activity is responsible for control of non-American Samoan's entry into American Samoa and for issuance of United States passports and visas. Two new immigration officers and a secretary will be added to the staff to bring Immigration staff to 27, the level considered necessary in order to meet the growing immigration pressure on American Samoa as a result of its favored economic position in the South Pacific.

Workload measures are as follows:

	Actual FY1973	Estimate FY1974	Estimate FY1975	FY74-75 % Change
No. of persons entering	87,000	95,000	110,000	+16%
Alien residents in American Samoa	14,000	15,000	16,000	+ 7%
Board Hearings	675	700	750	+ 7%
Vessels & Aircraft Arriving	4,000	4,700	5,000	+ 6%
Visas Issued	1,000	1,500	1,700	+17%
Passports & letters of identity issued	3,750	4,200	4,700	+12%

DEPARTMENT OF PUBLIC WORKS

FY 1974 $0; FY 1975 $1,376 thousand; Increase $1,376 thousand. This activity is financed jointly by Interior Budget Authority and local revenues as shown below:

	Approved FY1974	Estimated FY1975	Increase (+) Decrease (-)
Interior Budget Authority	-0-	1,376,000	+1,376,000
Local Basic Appropriation	3,172,000	2,183,000	- 989,000
Local Excess Revenue Approp's	186,000	-0-	- 186,000
Totals	3,358,000	3,559,000	+ 201,000

The net increase of $201 thousand over FY 1974 consists of:

Increase (+) or Decrease (-)

Category	Amount	Positions	Total Program	Total Position	Explanation
(1)	+162,000	+4 Contr. +6 Local	2,425,000	32 Contr. 427 Local	Addition of 10 new positions & normal step increases.
(2)	+ 26,000		78,000		Transportation for employee terminations & replacements recruitment & A&E contracts.

Increase (+) or Decrease (-)

Category	Amount	Positions	Total Program	Total Position	Explanation
(3)	- 8,000		107,000		Less contractual services for Construction Division due to reduction in force.
(4)	+ 21,000		111,000		Minor equipment for testing laboratory, working tools & office equipment.
(5)	- 19,000		378,000		Less materials-more projects to private contractors.
(6)	+ 19,000		460,000		Increased requirements for motor pool, electric utility & communication.
	201,000	+4 Contr. +6 Local	3,559,000	32 Contr. 427 Local	

Explanation of Changes

(1) Personal Services; $162 thousand increase: The net increase in personnel by four contract engineers and six local employees will cost $128 thousand. Normal step increases make up the remaining requirements for personnel services.

(2) Travel; $26 thousand increase: Transportation for four new contract employees, travel for attending seminars and refresher courses on the West Coast and for recruitment and review of A&E contracts. Travel requirements for FY 1975 are as follows:

a. $33 thousand for termination and replacement of contract employees.

b. $23 thousand for attending seminars and refresher courses in the U.S.

c. $17 thousand for recruiting and negotiating with A&E contractors.

d. $5 thousand for inter-island travel.

(3) Contractual Services; $8 thousand decrease: Decrease is due mainly to the reduction of operations of the Construction Division. Other divisions show a slight increase.

(4) Equipment (Small Capital Items); $21 thousand increase: Included in this category are minor equipment for the testing laboratory for sewer and water, lawn mowers, small trailers and portable generators, hand tools and office equipment. Increases are needed for growing maintenance programs.

(5) Materials and Supplies; $19 thousand decrease: Decrease in materials and supplies is due to reduction in the operations of the Construction Division in FY 1975. It is planned to consolidate carpentry section of the Construction Division with the Maintenance and Operations Division.

Construction Division is being reduced in size to allow local contractors to assume the work formally done by this Division.

(6) All Other Costs; $19 thousand increase: The following categories require increases in FY 1975:

a. Increased requirement for motor pool services; $8 thousand.

b. Electricity costs require an additional $4 thousand principally because additional pumps for sewer and water are being added to the systems.

c. Increases in telephone and communication use, heavy equipment rental, water transportation services and other miscellaneous items will cost $7 thousand.

Public Works Program

Activity	Approved FY1974	Estimate FY1975	Increase (+) Decrease (-)
Administration & Finance	216,000	239,000	+ 23,000
Engineering	692,000	894,000	+202,000
Maintenance & Operation	2,166,000	2,253,000	+ 87,000
Construction Administration	284,000	173,000	-111,000
Totals	3,358,000	3,559,000	+201,000

The objective of the Department of Public Works:

To provide services in administration, engineering, contract administration, and project management, to carry out most of the GAS capital improvements program. The Department also provides maintenance of most GAS facilities and supervises the motor pool and the electric utility operations.

a. Administration & Finance

A total of $239 thousand is needed for FY 1975, an increase of $23 thousand, or 11% over FY 1974.

This activity is responsible for management of all Department of Public Works divisions and most of the GAS construction activity. The increase is primarily in personnel services with the addition of a management analyst to update and improve internal control and procedures for the department.

b. Engineering

A total of $894 thousand is needed for FY 1975, an increase of $202 thousand, or 29% over FY 1974.

This activity consists of the following branches:

1. ENGINEERING ADMINISTRATION BRANCH--Engineering projects are initiated by this office. It is responsible for negotiating and monitoring consulting, testing and surveying contracts between GAS and outside contractors. The Branch organizes training for the Division's staff.

2. DESIGN BRANCH provides the basic architectural and engineering services for the Government of American Samoa and is the main contact for all A&E contractors engaged by GAS. It is responsible for all in-house design projects, and provides technical expertise to back up building inspectors and contract inspectors.

Five professional engineering staff are added in FY 1975 at a cost of $86 thousand, in order to better serve the capital improvements program. Contract termination and replacements require $7 thousand increase in travel.

3. LAND AND SURVEY BRANCH provides most of the survey capability for the entire territory. This includes boundary and topographic surveys and legal descriptions to support GAS capital improvements program. No increase in program is planned for FY 1975.

4. THE BUILDING BRANCH is responsible in checking plans for all proposed private construction in the Territory, issues building permits and inspects work during construction to insure compliance with building code, health and safety standards and zoning ordinances. Three staff are added at $26 thousand to handle anticipated additional workload.

5. THE HIGHWAY BRANCH was established at the beginning of FY 1974 to administer the territory's highway program. It is responsible for providing plans, design and specifications for road projects. Plans for FY 1975 include completion of access roads to all north-shore villages and a paved road to FHWA standards from Aua to Afono. Three staff presently funded by Federal planning grant will be added to the basic program in FY 1975.

6. CONTRACT BRANCH provides contract administration and construction inspection for the entire GAS capital improvements program. This function was formerly a part of the Construction Division, but with reorganization of the department a separate branch was established.

c. Maintenance & Operation

A total of $2,253 thousand is needed for FY 1975, an increase of $87 thousand or 4% over FY 1974.

This activity is responsible for the following:

1. Maintain all government-owned buildings and equipment through regular preventive maintenance, including painting and small repairs.

2. Maintain all public parks and grounds around schools, government office buildings, government housings and other government facilities.

3. Operate and maintain the water and sewer systems.

4. Collect and dispose of all solid wastes.

5. Provide maintenance of seawalls and storm drainage.

6. Maintain all primary and secondary roads to keep them free of pot-holes and loose gravel, and to keep shoulders trimmed.

7. Operate and maintain the aerial tramway to insure safety for passengers and durability of equipment.

No major changes in program areas and functions are planned in FY 1975. Goals for FY 1975 are to continue to upgrade the quality of work, cost control, efficiency and training of local employees. Seven additional employees will cost $32 thousand. The overall budget increase is slightly less than 5%, and is required for wage increases and inflationary growth of materials and supplies costs.

d. Construction Administration

A total of $173 thousand is needed in FY 1975, a decrease of $111 thousand, or 39% under FY 1974.

This activity is responsible for the administration of all construction projects performed by force account. This includes supervision on work schedules, manpower, materials purchasing and work coordination with other departments. It is planned to consolidate carpentry shop of the Construction Division with the M&O Division in FY 1975. It is also planned to let more construction projects go to outside bids and do less in-house work. The Construction Division will now specialize only in road and seawall construction rather than general construction. A reduction in force by seven positions will reduce personnel cost by $40 thousand; contractual services will decrease $10 thousand and equipment by $4 thousand; materials and supplies will be reduced by $13 thousand; all other miscellaneous items will cost $44 thousand less than FY 1974.

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Summary of Personnel Positions
U.S. Civil Service, Contract, & Local

	Number of Positions		
	FY1973	FY1974	FY1975
Direct Appropriations			
Governor's Office	17	17	17
Judiciary	18	15	17
	35	32	34
Education & Culture			
Department of Education	901	959	968
Museum	0	4	4
	901	963	972
Health Services			
Department of Medical Services	403	422	432
Economic Development			
Department of Agriculture	85	87	87
Development Planning Office	7	8	8
Office of Marine Resources	0	7	8
	92	102	103
Transportation, Communications & Power			
Department of Port Administration	82	96	25
General Government			
Legislature	77	77	77
Department of Administrative Services	147	185	194
Audit Office	6	7	7
Department of Legal Affairs	33	35	38
Local Government	90	90	90
Local Judicial	8	7	8
Department of Manpower Resources	22	25	28
Public Defender's Office	4	4	5
Department of Public Works	361	447	457
Office of Samoan Information	12	7	7
	760	884	911
Public Safety			
Department of Public Safety	154	164	189
Total Basic Operating Budget	2,427	2,663	2,666
Capital Improvements			
Construction Projects	198	135	150
Other			
Revolving Funds	494	675	754
Other Federal Grant Programs	271	243	243
	765	918	997
Total GAS	3,390	3,716	3,813

Summary of Personnel Positions
U.S. Civil Service & Contract

	Number of Positions		
	FY1973	FY1974	FY1975
Direct Appropriations			
Governor's Office	6	6	5
Judiciary	6	6	6
	12	12	11
Education & Culture			
Department of Education	59	78	72
Museum	0	0	0
	59	78	72
Health Services			
Department of Medical Services	19	29	31
Economic Development			
Department of Agriculture	2	5	5
Development Planning Office	0	0	0
Office of Marine Resources	0	0	0
	2	5	5
Transportation, Communications, & Power			
Department of Port Administration	6	8	2
General Government			
Legislature	2	2	2
Department of Administrative Services	17	14	14
Audit Office	1	1	1
Department of Legal Affairs	4	4	3
Local Government	0	0	0
Local Judicial	0	0	0
Department of Manpower Resources	5	4	2
Public Defender's Office	0	0	0
Department of Public Works	14	28	32
Office of Samoan Information	2	2	2
	45	55	56
Public Safety			
Department of Public Safety	2	1	1
Total Basic Operating Budget	145	188	178
Capital Improvements			
Construction Projects	13	0	0
Other			
Revolving Funds	8	5	14
Other Federal Grant Programs	52	43	43
Total GAS(USCS & Contract)	218	236	235

Summary of Personnel Positions
Local

	Number of Positions		
	FY1973	FY1974	FY1975
Direct Appropriations			
Governor's Office	11	11	12
Judiciary	12	9	11
	23	20	23
Education & Culture			
Department of Education	842	881	896
Museum	0	4	4
	842	885	900
Health Services			
Department of Medical Services	384	393	401
Economic Development			
Department of Agriculture	83	82	82
Development Planning Office	7	8	8
Office of Marine Resources	0	7	8
	90	97	98
Transportation, Communications, & Power			
Department of Port Administration	76	88	23
General Government			
Legislature	75	75	75
Department of Administrative Services	130	171	180
Audit Office	5	6	6
Department of Legal Affairs	29	31	35
Local Government	90	90	90
Local Judicial	8	7	8
Department of Manpower Resources	17	21	26
Public Defender's Office	4	4	5
Department of Public Works	347	419	425
Office of Samoan Information	10	5	5
	715	829	855
Public Safety			
Department of Public Safety	152	163	188
Total Basic Operating Budget	2,282	2,475	2,488
Capital Improvements			
Construction Projects	185	135	150
Other			
Revolving Funds	486	670	740
Other Federal Grant Programs	219	200	200
	705	870	940
Total GAS (Local)	3,172	3,480	3,578

FY73-75 Local Revenue Analysis/Projections
As of 17 January 1973
(Thousands of dollars)

Description (Source)	FY1973 Actual Revenue	FY 1974 Conserv. Estimate	FY 1974 Lo Optim Estimate	FY 1975 Conserv. Estimate	FY 1975 Lo Optim Estimate
Department of Agriculture					
Experimental Farm	12	0	0	0	0
All Other Agriculture	27	16	16	18	18
Sub-totals	39	16	16	18	18
Administrative Services					
Rents & Leases	291	320	320	352	352
Interest	131	250	300	275	330
Income Tax-Individual	1,936	2,400	2,500	2,700	2,900
Income Tax-Corporate	7,290	7,500	7,700	7,700	7,900
Licenses	121	132	132	146	146
Other Admin. Services	19	16	16	18	18
Sub-totals	9,788	10,618	10,968	11,191	11,646
Department of Education					
School Bus Operations	29	0	0	0	0
School Lunch Operations	7	4	4	0	0
Sub-totals	36	4	4	0	0
Department of Medical Services					
Hospital Care & Nurses	135	120	130	126	136
Pharmacy	11	8	11	9	12
Laundry Services	1	0	0	0	0
Cafeteria Services	30	36	36	38	38
Other Medical Services	45	40	45	40	45
Sub-totals	222	204	222	213	231
Department of Public Works					
Water	18	20	20	21	22
Aerial Tramway	15	20	24	20	24
Other Public Works	(17)	40	48	40	48
Sub-totals	16	80	92	81	94
Department of Port Administration					
Excise Tax	1,549	1,584	2,068	2,126	2,721
Customs & Harbor Charges	173	189	189	209	209
Pier & Dock Services	287	316	344	347	413
Harbor Craft Operations	71	78	78	0	0
Other Port Administration	4	20	35	22	38
Sub-totals	2,084	2,187	2,714	2,704	3,381
Miscellaneous Other Revenue					
Court Fees & Fines	27	30	44	33	48
Travel Permits	12	12	12	12	12
Miscellaneous Revenue	24	24	28	24	28
Sub-totals	63	66	84	69	88

Description (Source)	FY1973 Actual Revenue	FY 1974 Conserv. Estimate	FY 1974 Lo Optim Estimate	FY 1975 Conserv. Estimate	FY 1975 Lo Optim Estimate
Revolving Fund Surplus/Deficit					
Public Market	(6)	4	8	4	8
Supply Operations	58	0	0	0	0
Print Shop	8	0	0	0	0
Procurement	62	0	0	0	0
Liquor Store	51	50	100	200	250
Motor Pool	149	0	0	0	0
Marine Railway	61	70	80	90	100
Electric Utility	166	183	183	201	201
Sub-totals	549	307	371	495	559
Extraordinary Items					
Net Operations Surplus	74	0	0	0	0
Surplus Grant Match1/	24	0	0	0	0
Communications Office2/	300	0	0	0	0
Sub-totals	398	0	0	0	0
Totals	13,195	13,482	14,471	14,771	16,017
LESS PREVIOUS APPROPRIATIONS	13,195	10,241	10,241	0	0
AVAILABLE EXCESS REVENUES	0	3,241	4,230	14,771	16,017

1/ Appropriations for Federal grant cash match-subject grants did not materialize

2/ Communications Office converted to revolving fund operation in FY 1973-appropriation was reprogrammed

FY 1975 ANTICIPATED FEDERAL GRANT PROGRAMS

GAS Dept. or Office (Grant Recipient)	Granting Agency	Authorizing Legislation	Purpose of Grant	Federal Share	Local Match	Total Program
Operations						
Department of Education	HEW-USOE	Elementary & Secondary Educ. Act, Title I	Language instruction	358,000	-0-	358,000
		" " , Title II	Library books - private & public schools	8,000	-0-	8,000
		" " , Title III	Supplemental education centers	188,000	-0-	188,000
		" " , Title IV, A	Strengthening state departments	73,000	-0-	73,000
		" " , Title IV, C	Planning & evaluation	9,000	-0-	9,000
		Education of the Handicapped Act, Part B	Handicapped school programs	70,000	-0-	70,000
		" " , Part D	Handicapped - teacher training	42,000	-0-	42,000
		National Defense Educ. Act, Title III	School equip. & administration	4,000	-0-	4,000
		Educ. Professions Develop. Act, Part B-2	Teacher training	37,000	-0-	37,000
		" " , Part D	Drug education	10,000	-0-	10,000
		Library services & Constr. Act, Title I	Library services	40,000	-0-	40,000
		Vocational Education Act	Vocational education-Community College	93,000	-0-	93,000
		" " "	Advisory Council for Vocational Educ.	32,000	-0-	32,000
		Adult Basic Educ. Act	Adult education-Community College	41,000	-0-	41,000
		Higher Educ. Act, Title IV,C	College work study program	24,000	-0-	24,000
		Manpower Development & Training Act	Direction & supervision	37,000	-0-	37,000
		" "	Institutional training	100,000	-0-	100,000
	HEW-OCD	Econ. Opportunity Act, Section 242	Early childhood education	100,000	-0-	100,000
	USDA-FNS	National School Lunch Act	School lunch & breakfast	650,000	-0-	650,000
Ecologist	EPA	Environ. Protection Act	Air & water pollution control	59,000	13,000	72,000
Governor's Office	DOI-YCC	PL 12-378	Summer employment of youth	47,000	47,000	94,000
	NFAH-NEA	Nat. Foundation on the Arts & Humanities Act	Arts Council projects	47,000	47,000	94,000
Medical Services	HEW-PHS	PHS Act, Sec. 314(a)	Comprehensive health planning	77,000	13,000	90,000
		PHS Act, Sec. 314(d)	Health education	42,000	-0-	42,000
		" " "	Chronic & communicable diseases	41,000	-0-	41,000
		" " "	Health statistics & surveillance	22,000	-0-	22,000
		" " "	Filariasis control	45,000	-0-	45,000
		" " "	Dengne & yellow fever control	35,000	-0-	35,000
		" " "	Veneral disease control	16,000	-0-	16,000
		" " "	Mental health operations	65,000	-0-	65,000
		Social Security Act Title V, Sec. 504	Crippled children's services	104,000	-0-	104,000
		Social Security Act Title V, Sec. 503	Maternal & child health services	105,000	-0-	105,000

GAS Dept. or Office (Grant Recipient)	Granting Agency	Authorizing Legislation	Purpose of Grant	Federal Share	Local Match	Total Program
Marine Resources	DOC-NOAA	Nat. Sea Grant College & Program Act	Fishermen & biologist training	31,000	7,000	38,000
	DOC-NMFS	Comm. Fisheries R&D Act	Tuna industry development	90,000	30,000	120,000
	DOC-NMFS	Comm. Fisheries R&D Act	Statistical analysis of fisheries	10,000	4,000	14,000
	DOC-NMFS	Comm. Fisheries R&D Act	Baitfish development	19,000	7,000	26,000
	DOC-BSFW	Fed. Aid in Sport Fish Restoration Act	Sport fisheries development	40,000	-0-	40,000
Legal Affairs	DOJ-LEAA	Omnibus Crime Control & Safe Street Act	Law enforcement planning	117,000	13,000	130,000
		" " "	Law enforcement action programs	159,000	53,000	212,000
Development Planning	DOC-EDA	Public Works & Economic Development Act	Planning assistance	46,000	29,000	75,000
	HUD-CP&M	Housing Act, Sec. 701	Comprehensive territorial plan	75,000	25,000	100,000
Manpower Resources	DOL-MA	Manpower Development & Training Act	State admin. expense	20,000	-0-	20,000
		Economic Opportunity Act, Title I-B	Neighborhood Youth Corps	50,000	-0-	50,000
		Economic Opportunity Act, Title I-B, Sec.123a	Public Service Careers	100,000	-0-	100,000
		Emergency Employment Act	One year employment for unemployed	250,000	-0-	250,000
	DOL-WSA	Occupational Safety & Health Act	Compliance monitoring	41,000	-0-	41,000
			TOTAL OPERATING GRANT PROGRAMS	3,669,000	288,000	3,957,000
Capital Improvements						
Port Administration	USA-Corps of Engrs.	Small Navigation Projects Act	Develop small boat harbors	900,000	100,000	1,000,000
Public Works	DOT-FHA	Federal Highway Act	Road Development	1,000,000	447,000	1,447,000
	DOI-Geological Survey	Geological Survey Act of 1879	Water Development	32,000	22,000	54,000
Governor's Office	DOI-BOR	Land & Conservation Act	Recreation projects	50,000	50,000	100,000
			TOTAL CAPITAL IMPROVEMENT GRANT PROGRAMS	1,982,000	619,000	2,601,000
			TOTAL FY 1975 ANTICIPATED GRANT PROGRAMS	5,651,000	907,000	6,558,000
			LOCAL MATCH RESERVE FOR UNANTICIPATED PROGRAMS	-0-	193,000	193,000
			TOTALS	5,651,000	1,100,000	6,751,000

GOVERNMENT OF AMERICAN SAMOA
REVOLVING FUND OPERATIONS

	FY 1973 Actual			FY 1974 Estimated			FY 1975 Estimated		
	Revenue	Expend.	Net	Revenue	Expend	Net	Revenue	Expend	Net
Water Transportation	-0-	-0-	-0-	-0-	-0-	-0-	618,000	618,000	-0-
Airport *	591,736	375,954	215,782	650,000	446,000	204,000	750,000	500,000	250,000
Public Market	122,739	128,590	(5,851)	82,000	82,000	-0-	97,000	97,000	-0-
Poultry Laying Unit	-0-	-0-	-0-	19,000	19,000	-0-	22,000	22,000	-0-
Driver's Training *	83,464	40,306	43,158	43,000	43,000	-0-	45,000	45,000	-0-
Liquor Store	368,357	317,123	51,234	510,000	260,000	250,000	575,000	300,000	275,000
Print Shop	127,402	119,014	8,388	144,000	144,000	-0-	160,000	160,000	-0-
General Supply	318,458	260,885	57,573	350,000	350,000	-0-	441,000	441,000	-0-
Procurement	253,077	190,850	62,227	-0-	-0-	-0-	-0-	-0-	-0-
Air Force Housing *	54,630	52,051	2,579	54,000	54,000	-0-	-0-	-0-	-0-
Air Force Cafeteria *	23,435	69,393	(45,958)	118,000	118,000	-0-	-0-	-0-	-0-
Electric Utility	1,454,000	1,288,000	166,000	1,900,000	1,717,000	183,000	2,089,000	1,888,000	201,000
Motor Pool	556,010	407,344	148,666	396,000	396,000	-0-	532,000	532,000	-0-
Product Plant	-0-	-0-	-0-	349,000	349,000	-0-	366,000	366,000	-0-
Heavy Equipment	-0-	-0-	-0-	799,000	799,000	-0-	843,000	843,000	-0-
Communication Office *	731,513	783,747	(52,234)	709,000	709,000	-0-	757,000	757,000	-0-
Marine Railway	809,000	802,000	7,000	1,214,000	1,164,000	50,000	2,160,000	2,110,000	50,000
Totals	5,493,821	4,835,257	658,564	7,337,000	6,650,000	687,000	9,455,000	8,679,000	776,000

* Surplus or deficits for these activities in FY 1973 were retained within the activities and carried forward into FY 1974. The net FY 1973 surplus for the remaining activities was cleared to the General Fund and appropriated by Public Law 13-27 and 13-36 for FY 1974 activities.

PERSONNEL SUMMARY

	1973 Actual	1974 Estimate	1975 Estimate
Direct Program:			
Total number of permanent positions.....	57	12	12
Average number of paid employment.....	48	12	12
Reimbursable Program:			
Total number of permanent positions.....	--	53	55
Full-time equivalent of other positions.	--	1	1
Average paid employment.....	1	49	55
Average GS grade.....	10.9	11.2	11.5
Average GS salary.....	$18,262	$19,367	$19,416
Average salary of ungraded positions..	$4,347	$4,500	$4,600

ITEMIZATION OF ESTIMATE

Department of the Interior
Appropriation Title: Administration of Territories, Territorial Affairs

	1973 Actual	1974 Estimate	1975 Estimate	Increase (+) or Decrease (-)
Program and Financing:				
Total obligations.....	$23,748,570	$19,733,646	$23,122,846	$+3,389,200
Receipts and Reimbursements from Federal Funds.	-22,409	-1,340,744	-1,600,000	-259,256
Recovery of prior year obligations.....	-12,126	---	---	---
Unobligated balance, start of year.....	-11,191,527	-10,791,492	-6,522,846	+4,268,646
Unobligated balance transferred from other accounts.....	-939,000	---	---	---
Unobligated balance transferred to other accounts.	---	375,744	---	-375,744
Unobligated balance, end of year.....	10,791,492	6,522,846	---	-6,522,846
Budget Authority.....	22,375,000	14,500,000	15,000,000	+500,000

ITEMIZATION OF ESTIMATE

Department of the Interior
Appropriation Title: Administration of Territories, Territorial Affairs

	1973 Actual	1974 Estimate	1975 Estimate	Increase (+) or Decrease (-)
Direct Program:				
Object Classification:				
11 Personnel compensation...	$1,241,622	$ 601,000	$ 655,000	$ +54,000
12 Personnel benefits.....	109,370	44,000	54,000	+10,000
13 Benefits of former personnel.....	9,289	---	---	---
21 Travel and transportation of persons.....	99,671	50,000	50,000	---
22 Transportation of things.	33,016	27,000	28,000	+1,000
23 Rent, communications, and utilities.....	62,677	9,000	13,000	+4,000
24 Printing and reproduction	8,691	9,000	14,000	+5,000
25 Other services.....	86,605	29,877	65,000	+35,123
26 Supplies and materials...	23,123	15,000	20,000	+5,000
31 Equipment.....	24,271	8,000	10,000	+2,000
33 Investments and loans....	3,393,222	2,210,000	4,175,522	+1,965,522
41 Grants, subsidies, and contributions.....	18,634,604	15,390,025	16,438,324	+1,048,299
TOTAL DIRECT OBLIG.....	23,726,161	18,392,902	21,522,846	+3,129,944
Reimbursable Program:				
11 Personnel compensation...	20,404	977,200	1,150,000	+172,800
12 Personnel benefits.....	2,005	116,000	151,000	+35,000
21 Travel and transportation of persons.....	---	68,200	72,000	+3,800
22 Transportation of things.	---	57,000	62,000	+5,000
23 Rent, communications, and utilities.....	---	55,000	62,000	+7,000
24 Printing and reproduction.....	---	4,000	5,000	+1,000
25 Other services.....	---	39,344	58,000	+18,656
26 Supplies and materials...	---	13,000	17,000	+4,000
31 Equipment.....	---	11,000	23,000	+12,000
33 Investments and loans....	---	---	---	---
41 Grants, subsidies, and contributions.....	---	---	---	---
TOTAL REIMBURSABLE OBLIGATIONS.....	22,409	1,340,744	1,600,000	+259,256
TOTAL OBLIGATIONS.....	23,748,570	19,733,646	23,122,846	+3,389,200

Trust Territory of the Pacific Islands

HIGHLIGHT STATEMENT

Description

The Trust Territory of the Pacific Islands includes the Northern Mariana Islands, the Eastern and Western Caroline Islands, and the Marshall Islands. There is a total of 2,141 islands. Although they are scattered over three million square miles in the Western Pacific Ocean, they have but 700 square miles of land. An estimated population of 110,000 inhabits 97 of the islands. The Territory is divided for administrative purposes into six districts, each of which exhibits notable cultural and linguistic differences.

Authority and Government of the Territory

The responsibilities and mission of the United States in Micronesia are set forth in the July 18, 1947 Trusteeship Agreement between the United States and the United Nations Security Council. The obligations assumed under that agreement require the United States to promote the economic, social, political, health and educational development of Micronesia toward self-government. Executive Order 11021 of May 8, 1962, vested executive, legislative and judicial authority for administration of civil government in the Secretary of the Interior. Secretarial Order No. 2918 of December 27, 1968, as amended, delimits the extent and nature of the authority of the Government of the Trust Territory and prescribes the manner in which the relationships of that Government shall be established and maintained with the Congress of the United States, the Department of the Interior and other agencies, and with foreign governments and international bodies.

Following the United States separation-of-powers model, executive authority is vested in a High Commissioner appointed by the President. A bi-cameral Congress of Micronesia exercises legislative authority. Judicial authority rests in a High Court whose four Justices are appointed by the Secretary of the Interior. District Administrators, appointed by the High Commissioner, are responsible for Territorial affairs, including execution of laws passed by the District Legislature, in their respective jurisdictions.

Programs and Policies

The Trust Territory program derives from the fundamental need of any government to provide programs and services to the people which cannot be effectively or efficiently supplied by the individual or family. The Territorial government as a whole renders the full range of services comparable in range, if not in size, to those obtaining at Federal, State and local levels of the United States government. The United States is directly responsible within the Territory only for national defense, the postal system, and the monetary system. Indirect responsibility is exercised over other functions through Executive and Legislative control of United States appropriations and grants to finance the major share of Trust Territory government operations.

Programs include Education, Health Services, Resources and Development, Public Works, Public Affairs, Transportation and Communications, Attorney General, Finance, Personnel and several staff functions. Directors of these activities are responsible for establishment and implementation of Territory-wide policies and programs. District Administrators are responsible for program operations of each activity in their districts. Decentralization of authority and responsibility for program operations is proceeding in the face of immense problems involving communications, distance, and the lack of trained, qualified personnel at the district level.

The FY 1975 Program

The budget request for FY 1975 totals $61,000,000, an increase of $3,114,000 over the currently approved FY 1974 program.

The FY 1975 request for Operations is $50,843,000 (including the Office of the High Commissioner and the Judiciary), an increase of $2,717,000 over the $48,126,000 appropriated for FY 1974. The 1975 request for the Capital Improvement Program is $9,157,000, an increase of $397,000 over the $8,760,000 appropriated for FY 1974. The 1975 request for the Economic Development Loan Fund, authorized by Public Law 92-257, is $1,000,000, the same as appropriated in 1974.

The FY 1975 budget request contains a program increase in operations in Resources and Development, for the accelerated Lands and Surveys program on public lands, and for a new program, Comptroller for Guam (Direct Appropriation). The Comptroller for Guam program was authorized and required by Public Law 93-111, enacted September 21, 1973.

Of considerable significance in the area of improved personnel management was the recent passage and approval of Congress of Micronesia Public Law 5-51, entitled "The Trust Territory Salary Act of 1973." The Law establishes a new salary plan which provides a single uniform base salary schedule from which shall be derived the base salary to be paid all employees in positions not excluded by an earlier public law. Exclusions are primarily U.S. civil service, certain temporary positions, and specified executive level type positions. The Law establishes standards and limitations for the addition to the base salary of recruitment premiums for U.S. and other expatriate prime contract employees and for the addition of a U.S. tax relief allowance for U.S. contract employees. With this Law, the majority of employees (U.S. and Micronesian) for the first time are being paid from a single uniform base salary schedule. The Law became effective September 30, 1973. Salaries under the new pay plan in FY 1975 will increase about $2,142,000 for Micronesian staff and about $150,000 for U.S. and other expatriate staff.

The emphasis in the FY 1975 Capital Improvement program will be on Public Health Facilities. The funds requested will provide for a new hospital in the Yap district, an outpatient clinic for Palau, and renovation of the mechanical and electrical systems in Saipan's Dr. Torres Hospital. Funds requested for Transportation and Communications facilities will provide A&E for the Yap harbor and dock, road improvement in the Marianas, Palau, and Ponape, upgrading of the Saipan/Guam troposcatter system and replacement radio equipment for the outer islands, paving of the Rota airport, and A&E to extend and pave the Ponape airfield. Additional elementary classrooms are planned for the Marianas, Truk, and Ponape; a 256-student dormitory for Jaluit High School in the Marshalls; additional classrooms for the Ponape Island Central School; and additional classrooms for two High Schools in Truk (Weipat and the Mortlocks). The installation of physical infrastructure will continue with power projects for the Marianas, Ponape, and Truk, extension of water systems in the district centers of Ponape and Truk, and improvements to the water supply on the island of Rota in the Marianas. The rehabilitation of Bikini will continue and planning will be accomplished for the rehabilitation of Eniwetok. The work of the Civic Action Teams will be supported in all districts except the Marianas. Less significant amounts are requested for upgrading marine resources facilities, additional heavy equipment, small public works and supply warehouses for Kusaie, and for emergency and minor construction.

Funds requested in 1975 will provide for a staffing of 546 U.S. and 6,544 Micronesians, a decrease of 82 U.S. and 47 Micronesians from the level of FY 1974. U.S. employment requirements decrease by 2 in Health Services, 59 in Education, 3 in Public Affairs, 5 in Resources and Development, 2 in Protection to Persons and

Property, 3 in Administration, 2 in Transportation and Communications, and 6 in Public Works. Micronesian employment requirements increase by one in the Office of the High Commissioner, 8 in Education and 3 in Protection to Persons and Property. The increases in Micronesian employment are more than offset by decreases of 26 in Health Services, 4 in Public Affairs, 3 in Resources and Development, 3 in Administration, one in Transportation and Communications, and 22 in Public Works.

Appropriation, 1973		$60,000,000
Appropriation, 1974	$47,776,000	
First Supplemental Appropriation, 1974	10,110,000	
Total appropriation, 1974		57,886,000

Summary of Increases and Decreases, 1975

	Base for 1975	Increase 1975	
High Commissioner's Office			
To provide for increased operating costs	$ 411,000	+46,600	+46,600
Judiciary			
To provide for increased operating costs	400,000	+29,500	+29,500
Federal Comptroller's Office			
To provide for a new program as authorized and required by P.L. 93-111 (enacted September 21, 1973).	1/	+225,000	+225,000
Grants			
Net increase of $2,812,900 consists of increases of $2,415,900 for operations and $397,000 for capital improvements	56,075,000	+2,812,900	+2,812,900
Economic Development Loan Fund			
To maintain the level of funding for the Economic Development Loan Fund (P.L. 92-257)	1,000,000	---	---
Net increase, 1975			$+3,114,000
Budget Estimate, 1975			$61,000,000

1/ A reprogramming action is now pending to transfer $75,000 of FY 1974 NOA from Grants - Operations (Financial Management System) to the Federal Comptroller's Office, a new program authorized and required by Public Law 93-111 (enacted Sept. 21, 1973, and administered by the Comptroller for Guam).

Exhibit 2 (Part 1)

ANALYSIS BY ACTIVITIES

Activity	Fiscal Year 1973 Amount Available	Fiscal Year 1974 Total Appropriation	Fiscal Year 1974 Unobligated Balances	Fiscal Year 1974 Program
1. High Commissioner's Office	$ 295,375	$ 411,000	$ 38,525	$ 449,525
2. Judiciary	329,436	400,000	2,370	402,370
3. Federal Comptroller's Office.....	---	--- 1/	---	---
4. Grants	58,815,138	56,075,000 1/	14,422,471 2/	70,497,471
5. Economic Development Loan Fund	---	1,000,000	---	1,000,000
Total	$59,439,949	$57,886,000	$14,463,366	$72,349,366

1/ A reprogramming action is now pending to transfer $75,000 of FY 1974 NOA from Grants - Operations (Financial Management System) to the Federal Comptroller's Office, a new program authorized and required by Public Law 93-111 (enacted Sept. 21, 1973, and administered by the Comptroller for Guam).

2/ Includes Capital Improvement carryover of $12,981,910, needed to complete projects previously justified; and Operations carryover of $1,440,561. Of the Operations carryover, $60,201 is a portion of the $138,000 reprogrammed in late FY 1973 to fund a Comprehensive Census of the Trust Territory. The census day was originally slated for May, 1973, but the death of the Census Coordinator and other factors made it necessary to reschedule the census day to September 18, 1973. The $60,201 carried forward was used early in FY 1974 for the purpose originally justified. The balance of the Operations carryover, $1,380,360, is the subject of a pending reprogramming request. $720,000 is needed in FY 1974 to fund the Civic Action Teams (one in each district). The remaining balance, $660,360, is needed in FY 1974 to help fund the costs of new Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51 (effective date of the new schedules being September 30, 1973).

ANALYSIS BY ACTIVITIES

	FY 1973 Amount Available	FY 1974 Program	FY 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
1. High Commissioner's Office	$ 295,375	$ 449,525	$ 457,600	$ +8,075
2. Judiciary	329,436	402,370	429,500	+27,130
3. Federal Comptroller's Office.....	---	1/	225,000	+225,000
4. Grants	58,815,138	70,497,471	58,887,900	-11,609,571
5. Economic Development Loan Fund	---	1,000,000	1,000,000	---
Total	$59,439,949	$72,349,366	$61,000,000	$-11,349,366

1/ See 1/ on page 5.

The estimate of $61,000,000 for FY 1975 represents an increase of $3,114,000 in budget authority over FY 1974, exclusive of carryover funds of $14,463,366.

High Commissioner's Office	$ +46,600
Judiciary	+29,500
Federal Comptroller's Office.....	+225,000
Grants	+2,812,900
Economic Development Loan Fund	- 0 -
Increase	$+3,114,000

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BUDGET AUTHORITY

Summary by Activities
Fiscal Year 1975

	FY 1973	FY 1974	Estimate FY 1975	Increase + Decrease -
I. DIRECT APPROPRIATIONS:				
A. High Commissioner's Office	$ 313,000	$ 411,000	$ 457,600	$ +46,600
B. Judiciary	325,000	400,000	429,500	+29,500
C. Federal Comptroller's Office	- 0 -	1/	225,000	+225,000
Total - Direct Appropriations	$ 638,000	$ 811,000	$ 1,112,100	$ +301,100
II. GRANTS:				
A. OPERATIONS:				
1. Health Services	$ 6,924,000	$ 7,558,100	$ 7,774,700	$ +216,600
2. Education	11,490,000	12,839,500	12,855,600	+16,100
3. Public Affairs	2,139,000	2,632,300 2/	1,969,600 3/	-662,700
4. Resources and Development	4,548,000	5,524,000	7,764,500	+2,240,500
5. Protection to Persons and Property.	2,186,000	2,404,200	2,645,800	+241,600
6. Administration	4,744,000	5,221,000	5,306,500	+85,500
7. Transportation and Communications..	3,158,000	3,222,500	3,324,900	+102,400
8. Public Works	7,838,000	7,913,400	8,089,300	+175,900
Total - Operations	43,027,000	47,315,000	49,730,900	+2,415,900

Trust Territory of the Pacific Islands

	FY 1973	FY 1974	Estimate FY 1975	Increase + Decrease -
B. CAPITAL IMPROVEMENTS	$16,335,000	$ 8,760,000	$ 9,157,000	$ +397,000
Sub-Total - Grants	59,362,000	56,075,000	58,887,900	+2,812,900
Sub-Total - Direct and Grants	60,000,000	56,886,000	60,000,000	+3,114,000
III. ECONOMIC DEVELOPMENT LOAN FUND	- 0 -	1,000,000	1,000,000	- 0 -
GRAND TOTAL	$60,000,000	$57,886,000	$61,000,000	$+3,114,000

1/ A reprogramming action is now pending to transfer $75,000 of fiscal year 1974 NOA from Grants - Operations (Financial Management System) to the Federal Comptroller's Office, a new program authorized and required by Public Law 93-111 (enacted September 21, 1973, and administered by the Comptroller for Guam).

2/ Includes $450,000 for the Micronesian Constitution Convention and $100,000 for Education for Self- Government.

3/ Includes $100,000 for Education for Self-Government.

Personnel Staffing - Permanent Positions

FY 1973, 1974 and 1975

	FY 1973	FY 1974	FY 1975
DIRECT APPROPRIATIONS:			
U.S. - Civil Service	15	15	15
U.S. - Contract	2	3	3
U.S. Total	17	18	18
Micronesians	7	12	13
GRANTS - OPERATIONS:			
Health Services:			
U.S. - Civil Service	4	3	3
U.S. - Contract	40	36	34
U.S. Total	44	39	37
Micronesians	1,198	1,175	1,149
Education:			
U.S. - Civil Service	9	9	7
U.S. - Contract	259	242	185
U.S. Total	268	251	192
Micronesians	1,899	2,009	2,017
Public Affairs:			
U.S. - Civil Service	13	10	8
U.S. - Contract	3	3	2
U.S. Total	16	13	10
Micronesians	213	203	199
Resources and Development:			
U.S. - Civil Service	34	26	24
U.S. - Contract	43	46	43
U.S. Total	77	72	67
Micronesians	670	712	709
Protection to Persons and Property:			
U.S. - Civil Service	10	6	5
U.S. - Contract	17	23	22
U.S. Total	27	29	27
Micronesians	368	409	412

	FY 1973	FY 1974	FY 1975
Administration:			
U.S. - Civil Service	68	58	57
U.S. - Contract	33	38	36
U.S. Total	101	96	93
Micronesians	566	531	528
Transportation and Communications:			
U.S. - Civil Service	23	19	16
U.S. - Contract	11	14	15
U.S. Total	34	33	31
Micronesians	175	169	168
Public Works:			
U.S. - Civil Service	19	20	19
U.S. - Contract	65	57	52
U.S. Total	84	77	71
Micronesians	1,358	1,381	1,359
TOTAL - DIRECT APPROPRIATIONS AND GRANTS - OPERATIONS			
U.S. - Civil Service	195	166	154
U.S. - Contract	473	462	392
U.S. Total	668	628	546
Micronesians	6,454	6,601	6,554
CONSTRUCTION - Public Works (Paid from Capital Improvement Projects)			
U.S. - Civil Service	7	4	2
U.S. - Contract	58	59	57
U.S. Total	65	63	59
Micronesians	81	81	81
Industrial funded:			
Government Print Shop:			
U.S. - Civil Service	2	1	1
U.S. - Contract	-	1	1
U.S. Total	2	2	2
Micronesians	25	26	26

I. DIRECT APPROPRIATION

A. Office of the High Commissioner: FY 1974 $449,525, FY 1975 $457,600: Increase $8,075. The increase consists of:

Increase (+) or Decrease (-)		Total	Total	
Amount	Positions	Program	Positions	Explanation
(1) $ +6,200	...	...	...	Normal salary increments for 10 U.S. and 6 Micronesian ongoing positions.
(2) +15,900	...	...	...	Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51 and costs of transfer allowances authorized by Congress of Micronesia P.L. 4C-49.
(3) -14,025	+1 Micro	...	...	Increase of one Micronesian position more than offset by reductions in travel and other contractual services.
$ +8,075	+1 Micro	$457,600	10 U.S. 7 Micro	

Cost Factors Involved in Increases

(1) Normal salary increments for ongoing staff of 10 U.S. and 6 Micronesians, $6,200.

(2) Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51, $13,100. Cost of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, $2,800.

(3) Add one Micronesian position, $6,200; decreased travel, $2,400, and other contractual services, $17,825.

Need for Increase:

(1) Normal salary increments for 10 U.S. and 6 Micronesian ongoing positions, $6,200: Normal within grade increases must be awarded except in the case of unsatisfactory performance. An increase of $6,200 is requested to meet these increased pay costs.

(2) Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51 and costs of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, $15,900: New U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51 became effective September 30, 1973. In FY 1975, the new salary schedules will be in effect the full year. The amount of $13,100 is requested to fully fund the new salary schedules. Congress of Micronesia P.L. 4C-49 authorized transfer allowances for U.S. and certain Micronesian

employees upon initial recruitment. Those Micronesians recruited to work in other than their home district or recruited from other islands in their home district are eligible. Additionally, these same employees are eligible for transfer allowances if later transferred to new duty stations for the convenience of the Government. These costs are additional to those previously involved in recruitment. An increase of $2,800 is requested to fund this additional cost.

(3) Increase of one Micronesian position more than offset by reductions in travel and other contractual services, $-14,025: One Micronesian position is added at a cost of $6,200. Offsetting this increase are reductions in travel, $2,400, and in other contractual services, $17,825.

A. Office of the High Commissioner:

FY 1974 $449,525, FY 1975 $457,600: Increase $8,075

The estimate for the support of the Office of the High Commissioner is as follows:

	FY 1974 Estimate	FY 1975 Estimate	Increase + Decrease -
Personnel Compensation and Benefits	$318,400	$343,900	$+25,500
Business and Recruitment Travel	66,700	67,100	+400
All Other Object Classes	64,425	46,600	-17,825
Total	$449,525	$457,600	$ +8,075

Source of Funding for above:

Appropriated Funds	$411,000	$457,600	$+46,600
Unobligated funds brought forward from prior years	38,525	- 0 -	-38,525
Total	$449,525	$457,600	$ +8,075

A total of $457,600 is required for the support of the Office of the High Commissioner in FY 1975, an increase of $8,075 over FY 1974.

The executive and administrative authority of the Government of the Trust Territory of the Pacific Islands and the responsibility for carrying out the international obligations undertaken by the United States under the terms of the Trusteeship Agreement with the United Nations with respect to the Territory are vested in the High Commissioner, who is appointed by the President of the United States and is under the general supervision of the Secretary of the Interior.

The High Commissioner's "Cabinet" includes the Deputy High Commissioner, the Attorney General, the Executive Officer, the Special Consultant, the Special Assistants for District Affairs and Legislative Affairs, the Directors of Health, Education, Public Affairs, Resources and Development, Transportation and Communications, Finance, Personnel, Public Works, and the Program and Budget Officer.

The budget for the Office of the High Commissioner includes the salaries and the supporting costs of the High Commissioner and his immediate office staff. All other officials are funded from grants in the appropriate program areas.

Staffing:	FY 1974	FY 1975
	8 U.S. Civil Service	8 U.S. Civil Service
	2 U.S. Contract	2 U.S. Contract
	10 U.S. Total	10 U.S. Total
	6 Micronesians	7 Micronesians

The increase of $8,075 will provide $6,200 for normal salary increments, $15,900 for full year funding of new U.S. and Micronesian salary schedules and costs of transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, and $6,200 for the addition of a Micronesian Assistant for the Special Assistant for District Affairs. These increases are partially offset by reductions of $2,400 for travel and $17,825 for contractual services.

B. Judiciary: FY 1974 $402,370, FY 1975 $429,500: Increase $27,130. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $ +4,300	...	...	...	Normal salary increments for 8 U.S. and 6 Micronesian ongoing positions.
(2) +7,800	...	...	...	Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51 and costs of transfer allowances authorized by Congress of Micronesia P.L. 4C-49.
(3) +15,030	...	...	...	Minor increases in all supporting costs.
$+27,130	...	$429,500	8 U.S. 6 Micro	

Cost Factors Involved in Increases

(1) Normal salary increments for ongoing staff of 8 U.S., $2,300; and 6 Micronesians, $2,000.

(2) Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51, $5,000. Cost of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, $2,800.

(3) Increased equipment, $4,000; printing, $3,800; supplies and materials, $2,630; travel, $2,100; other services, $2,500.

Need for Increase:

(1) Normal salary increments for 8 U.S. and 6 Micronesian ongoing positions, $4,300: Normal salary increments must be awarded except in the case of unsatisfactory performance. An increase of $4,300 is requested to meet these increased pay costs.

(2) Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51 and costs of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, $7,800: New U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51 became effective September 30, 1973. In FY 1975, the new salary schedules will be in effect the full year. The amount of $5,000 is requested to fully fund the new salary schedules. Congress of Micronesia P.L. 4C-49 authorized transfer allowances for U.S. and certain Micronesian employees upon initial recruitment. Those Micronesians recruited to work in other than their home district or recruited from other islands in their home district are eligible. Additionally, these same employees are eligible for transfer allowances if later transferred to new duty stations for the convenience of the Government. These costs are additional to those previously involved in recruitment. An increase of $2,800 is requested to fund this additional cost.

(3) Minor increases in all supporting costs, $15,030: Other increases include $4,000 for equipment, $3,800 for printing and reproduction, $2,630 for supplies and materials, $2,100 for travel, and $2,500 for various other services.

B. Judiciary:

FY 1974 $402,370, FY 1975 $429,500: Increase $27,130

The estimate for the support of this office in FY 1975 is as follows:

	FY 1974 Estimate	FY 1975 Estimate	Increase + Decrease -
Personnel Compensation and Benefits	$258,600	$267,900	$ +9,300
Business and Recruitment Travel	105,200	110,100	+4,900
All Other Object Classes	38,570	51,500	+12,930
Total	$402,370	$429,500	$+27,130

Source of Funding for above:

Appropriated funds	$400,000	$429,500	$+29,500
Unobligated funds brought forward from prior years	2,370	- 0 -	-2,370
Total	$402,370	$429,500	$+27,130

A total of $429,500 is required to support the Judiciary - High Court in FY 1975, an increase of $27,130 over FY 1974.

There are three types of courts in the Trust Territory: High Court, District Court, and Community Courts. In this document "Judiciary" applies only to the High Court, with the District and Community Courts being funded as "Local Judiciary" in the Grant funds.

The High Court has Trial and Appellate Divisions. The Trial Division has original jurisdiction to try all cases, civil and criminal, including probate, admiralty, and maritime matters, and the adjudication of title to land or any interest therein. The Appellate Division has jurisdiction to review, on appeal, the decisions of the Trial Division of the High Court in the following instances:

1. All cases tried originally in the High Court.

2. Certain cases decided by the High Court on appeal from a District Court.

3. All cases decided by the High Court on review of the record of a District or Community Court decision in which the High Court has reversed or modified the decision so as to affect the substantial rights of the appellant.

The High Court presently is staffed with a Chief Justice, three Associate Justices, and supporting administrative and court reporter/secretarial personnel.

The Trial Division of the High Court holds sittings on a circuit-riding basis at the six district centers, and with a fair degree of regularity at three of the sub-centers, in addition to sittings at outlying islands when the need arises. The High Court Judges, the Director, and the Deputy Director also supervise the work of, and endeavor to train the District and Community Court Judges and the Clerks of Courts and their assistants, who have had either very little or no legal training prior to their appointments.

Judiciary operations are funded partly from appropriated funds (High Court and Chief Justice Office) and partly from grant funds (Local Judiciary). Therefore, separate budgets and separate narrative justifications are prepared for these two sections of the Judiciary. All of the Courts in the Trust Territory share facilities, personnel, equipment and some responsibilities. Funds cannot be justified solely for High Court and solely for Local Judiciary use. High Court funds will be utilized in part to train and assist the Micronesian members in the Local Judiciary. Extensive training and assistance to the District and Community Courts remain a basic function of the High Court.

The funds requested for FY 1975 will enable the High Court to provide the following:

(a) A qualified High Court staff for:

  (1) The hearing of the most serious criminal and civil cases.

  (2) The hearing of cases under appeal.

  (3) Expanded training of Micronesian Judiciary personnel.

  (4) Professional supervision of the courts.

  (5) Accurate transcripts of trials.

  (6) Review of lower court decisions.

(b) Travel necessary for:

  (1) The prompt hearing of cases in all districts including outlying islands.

  (2) Continuing to decrease the backlog of cases through more frequent High Court sittings. (See attached statistical charts.)

  (3) Training and supervision of Micronesian personnel by having the High Court staff available more frequently in all districts.

  (4) Training of Micronesians through conferences and structured observation of other courts, both within and outside the Trust Territory.

(c) Funds for printing to insure High Court opinions will continue to be printed, made available to all concerned promptly, and added to the volumes of the Trust Territory Reports.

(d) Training programs will be continued and expanded: to increase the efficiency of the courts, to provide higher quality of justice in the lower courts, and to enable Micronesians to assume more responsible positions within the Judiciary. The training programs will include Judiciary scholarships for Micronesians to study law and court reporting in the U.S., and training conferences for Micronesian Judiciary employees.

(e) Equipment necessary for more adequate functioning of the courts will be procured or improved, including legal research materials and basic office equipment.

All lower courts throughout the Trust Territory will continue to be staffed entirely by Micronesians in FY 1975.

Staffing:	FY 1974	FY 1975
	7 U.S. Civil Service	7 U.S. Civil Service
	1 U.S. Contract	1 U.S. Contract
	8 U.S. Total	8 U.S. Total
	6 Micronesians	6 Micronesians

The increase of $27,130 will provide $4,300 for normal salary increments, $7,800 for new U.S. Contract and Micronesian salary schedules and transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, and increases of $2,100 in travel, $3,800 for printing, $2,630 for supplies and materials, $4,000 for equipment, and $2,500 for other object classes.

CHART NO. 1

TRUST TERRITORY COURTS

Cases Disposed of Per Year

	High Court Appellate Division		High Court Trial Division		District Court		Community Court	
	Criminal	Civil	Criminal	Civil	Criminal	Civil	Criminal	Civil
1965	6	5	46	125	1,463	1,035	710	1,739
1966	1	2	41	89	1,509	853	1,150	2,546
1967	0	1	44	175	1,736	1,406	934	2,456
1968	1	3	54	251	2,545	1,273	1,388	2,589
1969	3	11	67	193	2,988	1,365	1,282	2,403
1970	3	12	73	153	3,016	1,236	1,450	2,636
1971	1	16	110	756	3,942	1,603	1,092	1,355
1972	2	3	124	218	3,354	1,185	1,219	2,591
1973*	2	1	47	137	2,300	704	578	1,429

* NOTE: 1973 figures show cases disposed of at the end of second

CHART NO. 2

TRUST TERRITORY COURTS

Cases Pending at End of Year

	High Court Appellate Division		High Court Trial Division		District Court	
	Criminal	Civil	Criminal	Civil	Criminal	Civil
1965	1	6	23	269	66	215
1966	0	5	25	335	132	341
1967	1	6	15	327	142	206
1968	2	23	28	231	217	266
1969	4	28	5	312	229	422
1970	6	28	54	876 1/	328	454
1971	6	17	73	350	375	381
1972	8	25	55	356	512	461
1973 2/	9	28	58	380	574	445

NOTE: Community Courts report only cases disposed of; pending cases are not reported.

1/ Includes over 500 damage and loss claims against one shipping company.

2/ Figures show cases pending at end of second quarter of 1973.

C. Federal Comptroller's Office: FY 1974 $ -0-, FY 1975 $225,000: Increase $225,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+225,000	7	$225,000	7	New program.
	$+225,000	7	225,000	7	

Cost Factors Involved in Increases

(1) $169,000 for salaries and benefits of 7 additional positions, $50,000 for travel, $6,000 for other services.

Need for Increase:

(1) New Program, $225,000: Public Law 93 -111 approved 9/21/73 directed the Comproller of Guam to audit the activities of the Trust Territory Government.

The amount of $225,000 is required for the Federal Comptroller's Office, an increase of $225,000 over FY 1974.

Public Law 93-111, which provides authorizing legislation for the Trust Territory Government, also provides that the Comptroller for Guam shall audit the operations of the Trust Territory Government. The Comptroller for Guam is under the general supervision of the Secretary of the Interior and is not a part of any executive department of the Trust Territory Government. The audit activities of the government comptroller are directed so as to (1) improve the efficiency and economy of programs of the government of the Trust Territory of the Pacific Islands and (2) discharge the responsibility incumbent upon the Congress to insure that the substantial Federal revenues which are covered into the treasury of such government are properly accounted for and audited. In FY 1975 Federal auditors are expected to perform eight departmental audits, the annual fiscal audit reports, the annual report, and other special audits as required.

There are no Trust Territory employees in this activity. The positions listed above reflect the estimated staffing requirements for this activity. Future budgets will display this activity as a reimbursable program in the Administration of Territories budget (similar to the audit programs now performed by the Comptroller, Virgin Islands, and Guam).

A pending reprogramming request will transfer $75,000 of FY 1974 funds for the Financial Management System to the Comptroller for Guam to provide for initiating this program in FY 1974 as authorized by Public Law 93-111. The work program will include an indebth workload and logistical survey plus several management type audits.

II. GRANTS:

A. OPERATIONS

1. Health Services: FY 1974 $7,558,100, FY 1975 $7,774,700: Increase $216,600. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+210,000	...	...	...	Normal salary increments for 37 U.S. and 1,149 Micronesian ongoing positions.
(2) +441,800	...	...	...	Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51, costs of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, and of positions partially lapsed in FY 1974.
(3) -435,200	-2 U.S. -26 Micro	...	...	The high priority of Capital Improvement projects makes it necessary to operate our health facilities with less staff and with tighter allowances for supplies, equipment, and other support costs.
$+216,600	-2 U.S. -26 Micro	$7,774,700	37 U.S. 1,149 Micro	

Cost Factors Involved in Increases

(1) Normal salary increments for ongoing staff of 37 U.S., $23,900, and 1,149 Micronesians, $186,100.

(2) Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51: U.S., $37,100, Micronesians, $385,900. Cost of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, $11,600. Full funding of one position partially lapsed in FY 1974, $7,200.

(3) Decrease of $33,800 from elimination of two U.S. positions and of $44,700 from dropping 26 Micronesian positions. Decreases also in travel, $57,100; supplies, $148,700; equipment, $60,600; other support costs, $90,300.

Need for Increase:

(1) Normal salary increments for 37 U.S. and 1,149 Micronesian ongoing positions, $210,000: Normal within grade increases must be awarded except in the case of unsatisfactory performance. The Micronesian staff is a young staff and the pattern of an older staff higher in grade and in increments retiring and being replaced by youth in lower grade and beginning increments will not be evident for some years to come. An increase of $210,000 is requested to meet these increased pay costs.

(2) Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51, costs of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, and of positions partially lapsed in FY 1974, $441,800: New U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51 became effective September 30, 1973. In FY 1975 the new salary schedules will be in effect the full year. The amount of $423,000 is requested to fully fund the new salary schedules. Congress of Micronesia P.L. 4C-49 authorized transfer allowances for U.S. and certain Micronesian employees upon initial recruitment. These costs are additional to those previously involved in recruitment. An increase of $11,600 is requested to fund these transfer allowances. One position for which recruitment was delayed in FY 1974 will require full funding in FY 1975. The amount of $7,200 is requested to fully fund this position.

(3) The high priority of Capital Improvement projects makes it necessary to operate our health facilities with less staff and with tighter allowances for supplies, equipment, and other support costs, $-435,200: The high priority of needed Capital Improvement projects as expressed repeatedly by the Congress of Micronesia and supported by the Administration makes it necessary to do all possible to hold down rising costs in Operations. In this budget staffing has been pruned wherever possible with 28 positions being dropped in FY 1975: Two U.S. and 26 Micronesians at a savings of $78,500. Tighter allowances for supplies, contractual services, equipment, travel and other support costs permit a decrease in the budget request of $356,700.

Trust Territory of the Pacific Islands

Activity	FY 1974 Estimate	FY 1975 Estimate	Increase + Decrease -
1. Health Services:			
a. Medical Administration	$ 363,800	$ 377,000	$ +13,200
b. Hospitals and Outer-Islands Dispensaries	6,219,300	6,412,700	+193,400
c. Environmental Health and Sanitation	292,900	274,600	-18,300
d. Dental Services	444,600	469,300	+24,700
e. Trust Territory School of Nursing	237,500	241,100	+3,600
Total	$7,558,100	$7,774,700	$+216,600

The Health Services Program is established to maintain and improve health and environmental conditions, minimize and eventually control communicable disease, establish standards of medical and dental care, encourage scientific investigations in the field of health, supervise and administer all government-owned hospitals, clinics, dispensaries and other medical and dental facilities.

a. Medical Administration:

FY 1974 $363,800, FY 1975 $377,000: Increase $13,200

The amount of $377,000 is required in FY 1975 for Medical Administration, an increase of $13,200 over FY 1974.

The administration and technical supervision of all health programs is carried out by specialists in the fields of medicine, dentistry, health services and hospital administration, nursing, environmental health and sanitation, health planning and evaluation, vital statistics, and medical equipment repair.

Comprehensive health planning has resulted in increasing implementation of Preventive Health Programs. A very active Health Council which meets at least three times per year provides guidance to the districts' health services staff in these areas. Programs in venereal disease detection, in cervical cancer detection and in loss of hearing detection in children are being accelerated.

In FY 1975, four new Micronesian positions will be added: One assistant chief nurse; one medical equipment repair specialist; one program analyst and one health educator. The latter two positions are now funded by Special Grant Funds. One U.S. position, Medical Equipment Repair Specialist, will be eliminated.

Staffing:	FY 1974	FY 1975
	2 U.S. Civil Service	2 U.S. Civil Service
	4 U.S. Contract	3 U.S. Contract
	6 U.S. Total	5 U.S. Total
	21 Micronesians	25 Micronesians

The increase of $13,200 includes normal salary increments of $6,400; full year funding of new salary schedules and transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, $19,200; and the addition of four new Micronesian positions at $24,500. The increase is partially offset by the elimination of one U.S. position, $15,800; decreased travel, $13,100; supplies and materials, $3,000; and contractual services, $5,000.

b. Hospitals and Outer Islands Dispensaries:

FY 1974 $6,219,300, FY 1975 $6,412,700: Increase $193,400

The amount of $6,412,700 is required in FY 1975 for Hospitals and Outer Islands Dispensaries, an increase of $193,400 over FY 1974.

The Trust Territory Government provides all the medical care that is available for the citizens of Micronesia. There are no private hospitals or pharmacies. There are no medical officers in private practice. Delivery of health care is almost exclusively carried out by Micronesian medical officers, dental officers, sanitarians, nurses, health aides and other paramedical personnel. The general level of health is quite good. Some of the outer island services are substandard in terms of appropriately trained health aides and good physical facilities. This is improving constantly with continuous health aide training programs and an accelerated dispensary replacement program.

Medical referrals, medical supplies, and medical/surgical equipment are included in the Hospitals and Outer Islands Dispensaries account.

Medical care is provided through the six district hospitals, three subdistrict hospitals and 154 outer island dispensaries. The new Ebeye Hospital and Kusaie Hospital of 22 beds each will be in operation in FY 1974 and FY 1975 respectively. The new Ponape Hospital of 120 beds will be under construction through FY 1975. The new 50-bed Yap Hospital is also expected to be under construction in FY 1975. All these capital improvements are indicative of efforts to modernize physical facilities as well as the training of personnel. Staffing these facilities with additional medical specialists is expected to reduce medical referrals although not necessarily medical referral expenditures, as off-island hospital fees have risen significantly in recent months. (In FY 1973, 443 inpatient and 259 outpatient visits to Guam and Honolulu clinics and hospitals were recorded. Total medical referral expenditures for hospital and medical fees, transportation and subsistence for patients and escorts approximated $740,000.)

In the final two months of FY 1973, the Trust Territory received grants for Maternal and Child Health and Crippled Children Programs. Activities in these areas as well as in family planning will, accordingly, be intensified. The mass immunization program (assisted by the Communicable Disease Center of Atlanta, Georgia) will continue. Greater efforts in Tuberculosis and Venereal Disease Control Programs are anticipated.

Vocational Rehabilitation, Developmental Disabilities and Mental Health will be given greater attention. In early FY 1974, a psychiatrist was employed to give impetus to the Trust Territory Mental Health Service.

Through the training of Medex (physician assistants), under the auspices of the University of Hawaii, better quality medical care is ensured the outer island population.

Increases in the number of admissions to hospitals and outpatient visits can be expected as a result of a growing population, increased tourism and imported workers, as well as expanded facilities. The increases are anticipated to be approximately 1,000 in admissions and 10,000 outpatient visits.

Staffing:	FY 1974	FY 1975
	25 U.S. Contract	25 U.S. Contract
	996 Micronesians	969 Micronesians

The increase of $193,400 will provide for normal salary increments of $179,600; and for full year funding of new salary schedules and transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, $354,700. These increases are partially offset by reductions in travel, $31,800; contractual services, $77,100; supplies and materials, $136,800; equipment, $32,800; and the elimination of twenty-seven Micronesian positions for a saving of $62,400.

c. Environmental Health and Sanitation:

FY 1974 $292,900, FY 1975 $274,600: Decrease $18,300

The amount of $274,600 is required for Environmental Health and Sanitation in FY 1975, a decrease of $18,300 below FY 1974.

The function of the Environmental Health and Sanitation Division is to develop a comprehensive program of environmental health to protect the public from diseases caused by unsanitary and polluted conditions. This division is also charged with assisting the Trust Territory Environmental Protection Board in their effort to develop and implement comprehensive and long-range plans for surveillance and control of all forms of pollution. Continued education and training of all sanitarians will be sponsored by the Environmental Protection Agency, Region IX, San Francisco and the South Pacific Commission.

Staffing:	FY 1974	FY 1975
	1 U.S. Contract	- 0 - U.S.
	64 Micronesians	62 Micronesians

The decrease of $18,300 is primarily due to the elimination of one U.S. and two Micronesian positions at $21,800, as well as reduced travel, $10,500; supplies and materials, $1,900; and a sharp cut in equipment purchases, $11,400. Partially offsetting these decreases are increases covering normal salary increments, $9,300; and full year funding of new salary schedules and transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, $18,000.

d. Dental Services:

FY 1974 $444,600, FY 1975 $469,300: Increase $24,700

The amount of $469,300 is required in FY 1975 for Dental Services, an increase of $24,700 over FY 1974.

The function of the Dental Services Division is to develop and implement a comprehensive program of dental health and education in order to promote quality dental care with emphasis on preventive dental care.

For the above reason, more effort will be directed towards dental care and education of school children as well as the general public. In addition, assistance will be given to dental care of those individuals seen in the maternal and child health care clinics.

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Education of dental nurses and hygienists at the Dental School associated with the Micronesian Occupational Center will continue.

Staffing:	FY 1974	FY 1975
	1 U.S. Contract	1 U.S. Contract
	82 Micronesians	80 Micronesians

The increase of $24,700 will provide for normal salary increments of $17,300, and full year funding of new salary schedules and transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, $36,100. The elimination of two Micronesian positions at $4,700, a reduction of $16,400 in equipment purchases, and $7,600 in other cost categories partially offset the increases.

e. Trust Territory School of Nursing:

FY 1974 $237,500, FY 1975 $241,100: Increase $3,600

A total of $241,100 is required for the Nursing School in FY 1975, an increase of $3,600 over FY 1974.

The School of Nursing, under the supervision of the Director of Health Services, provides nursing training to scholarship grantees. The training consists of a two and one-half year course of study in clinical and basic public health nursing.

The faculty provide instructions and supervision of all clinical and public health nursing.

Students are provided with transportation to and from their home district, uniforms, books, room and board, graduation pins and diplomas from the Trust Territory School of Nursing and University of Guam, plus stipends to cover personal hygienic necessities. Enrollment of students will be eighty (80).

Staffing:	FY 1974	FY 1975
	1 U.S. Civil Service	1 U.S. Civil Service
	5 U.S. Contract	5 U.S. Contract
	6 U.S. Total	6 U.S. Total
	12 Micronesians	13 Micronesians

The increase of $3,600 includes normal salary increments of $4,600 and $6,600 for full year funding of new pay schedules and transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, plus $1,700 for the addition of one Micronesian position. These increases are partially offset by decreases in contractual services of $6,400, in supplies and materials, $1,800, and in travel, $1,100.

TABLE I

UTILIZATION OF HOSPITAL FACILITIES

Fiscal Year 1973

District Hospital	Beds Available	Average Daily Census	Percent of Occupancy	Total Census Days	Outpatient Visits
Marianas	92	49	53	17,937	38,587
Marshalls	88	68	77	24,750	58,374
Palau	82	51	62	18,725	40,822
Ponape	68	40	59	14,442	43,021
Truk	125	78	62	28,413	55,988
Yap	42	18	43	6,529	15,592
Total	497	304	61	110,796	252,384
Sub-Hospitals					
Rota	10	5	50	1,980	8,525
Ebeye	18	13	72	4,753	60,435
Kusaie	14	11	79	3,913	7,087
Total	42	29	69	10,646	76,047
GRAND TOTAL	539	333	61	121,442	328,431

TABLE II (1)

PATIENT ADMISSIONS

	FY 1970	FY 1971	FY 1972	FY 1973
TOTAL	10,005	10,783	11,062	11,547
Marianas	1,750	1,788	1,672	1,679
Marshalls	1,263	1,594	1,784	2,007
Palau	2,168	2,297	2,039	2,114
Ponape	1,849	1,979	2,142	2,101
Truk	2,261	2,481	2,667	2,752
Yap	714	644	758	894

(1) Figures do not include admissions to subdistrict hospitals at Ebeye, Kusaie and Rota.

2. Education: FY 1974 $12,839,500, FY 1975 $12,855,600: Increase $16,100. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $ +483,800	...	...	...	Normal salary increments for 192 U.S. and 2,009 Micronesian ongoing positions.
(2) +773,500	...	...	...	Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51, costs of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, and of positions partially lapsed in FY 1974.
(3) -1,241,200	-59 U.S. +8 Micro	...	...	The high priority of Capital Improvement projects makes it necessary to operate our schools with less staff and much tighter allowances for supplies, equipment, travel and other support costs.
$ +16,100	-59 U.S. +8 Micro	$12,855,600	192 U.S. 2,017 Micro	

Cost Factors Involved in Increases

(1) Normal salary increments for ongoing staff of 192 U.S., $78,900, and 2,009 Micronesians, $404,900.

(2) Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51: Micronesians, $685,300, partially offset by U.S. decrease of $12,900. Cost of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, $93,500. Full funding of positions partially lapsed in FY 1974, $7,600.

(3) Net decrease of 51 positions resulting in savings of $635,500 (drop 59 U.S., $684,500, add 8 Micronesians, $49,000). Decreases in travel, $39,400; supplies and materials, $372,200; equipment, $142,700; all other support costs, $51,400.

Need for Increase:

(1) Normal salary increments for 192 U.S. and 2,009 Micronesian ongoing positions, $483,800: Normal within grade increases must be awarded except in the case of unsatisfactory performance. The Micronesian staff is a young staff and the pattern of an older staff higher in grade and in increments retiring and being replaced by youth lower in grade and in beginning increments will not be evident for some years to come. An increase of $483,800 is requested to meet these increased pay costs.

(2) Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51, costs of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, and of positions partially lapsed in FY 1974, $773,500: New U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51 became effective September 30, 1973. In FY 1975 the new salary schedules will be in effect the full year. The amount of $672,400 is requested to fully fund the new salary schedules. Congress of Micronesia P.L. 4C-49 authorized transfer allowances for U.S. and certain Micronesian employees upon initial recruitment. Those Micronesians recruited to work in other districts than their home district or recruited from other islands in their home district are eligible. Additionally, these same employees are eligible for transfer allowances if later transferred to new duty stations for the convenience of the Government. These costs are additional to those previously involved in recruitment. An increase of $93,500 is requested to fund these transfer allowances. Those few positions for which recruitment was delayed in FY 1974 will require full funding in FY 1975. The amount of $7,600 is requested to fully fund these positions.

(3) The high priority of Capital Improvement Projects makes it necessary to operate our schools with less staff and much tighter allowances for supplies, equipment, travel and other support costs, $-1,241,200: The high priority of needed Capital Improvement projects as expressed repeatedly by the Congress of Micronesia and supported by the Administration makes it necessary to do all possible to hold down rising costs in Operations. In this budget staffing has been pruned wherever possible while still providing for increased enrollment in our high schools. A net of 51 positions will be dropped in FY 1975: 59 U.S. positions will be dropped at savings of $684,500, 8 Micronesian positions will be added at a cost of $49,000; allowing a decrease of $635,500 in the budget request. Tighter allowances for supplies, equipment, travel and other support costs permit a decrease in the budget request of $605,700. Every effort will be made to sustain or better the current level of quality throughout our education programs.

Activity	FY 1974 Estimate	FY 1975 Estimate	Increase + Decrease -
2. Education:			
a. Administration	$ 976,200	$ 1,123,700	$+147,500
b. Elementary	5,819,400	5,967,600	+148,200
c. Secondary	3,792,600	3,544,100	-248,500
d. Scholarship and Medical Education	632,800	632,600	-200
e. Micronesian Occupational Center	868,300	884,500	+16,200
f. Community College of Micronesia	459,600	435,700	-23,900
g. Micronesian Maritime Center	78,600	55,400	-23,200
h. Aid to Non-Public Schools	212,000	212,000	- 0 -
Total	$12,839,500	$12,855,600	$ +16,100

a. Administration:

FY 1974 $976,200, FY 1975 $1,123,700: Increase $147,500

A total amount of $1,123,700 is required for Education Administration in FY 1975, an increase of $147,500 over FY 1974.

The Department of Education is headed by a Director and a Deputy Director. Their immediate staff, whose function is to coordinate programs, channel information, and implement education policies throughout the six districts, includes two Assistant Directors and an Administrative Officer. The Administrative Officer has in-line authority over staff in the areas of finance, facilities, federal programs, student services, personnel services, and research and development. One Assistant Director has in-line authority over program staff in the areas of elementary, secondary, teacher and special education, library services, and English language programs instructional development. The other Assistant Director has in-line authority in the areas of vocational and pre-vocational programs, home economics, adult basic education, and manpower development and training programs. This Assistant Director acts as technical assistant to Micronesian Occupational Center, the Community College of Micronesia, and Micronesian Maritime Center.

At the district level, the District Directors of Education are responsible for the operation of all public schools. Each district operates one or more high schools, and from twelve to fifty-eight elementary schools. The District Directors' functions include implementation of policies; employment of teachers; assignment and direction of staff; requisitioning, storage and distribution of all supplies and equipment; and curriculum development. District staffs and Boards of Education are continually assessing and evaluating their needs for possible revision of direction of their programs, particularly in the area of economic skills.

Education Administration is responsible for all matters pertinent to the total operation of schools; e.g., management of logistic support, supervision and improvement of instruction, dormitory management, budget preparations, development of curriculum materials, in-service teacher training, determination of needs for school buildings and facilities; and participation in the development of long range policies and plans for education.

The District Directors of Education as well as the Directors of Micronesian Occupational Center, Community College of Micronesia, and Micronesian Maritime Center report to the Director of Education through the District Administrators.

In FY 1975, nine new Micronesian positions are added to strengthen administrative staffing in Ponape and Majuro. U.S. staffing remains at twenty-six in FY 1975, the same number as in FY 1974.

Staffing:	FY 1974	FY 1975
	2 U.S. Civil Service	2 U.S. Civil Service
	24 U.S. Contract	24 U.S. Contract
	26 U.S. Total	26 U.S. Total
	95 Micronesians	104 Micronesians

The increase of $147,500 will provide for normal salary increments of $33,900; full year funding of new salary schedules and costs of transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, $87,500; and funding of nine new Micronesian positions at $44,100. These increases are partially offset by decreases in supplies, $5,100; equipment, $6,900; travel, $5,200; and a decrease of $800 in other cost categories.

b. Elementary:

FY 1974 $5,819,400, FY 1975 $5,967,600: Increase $148,200

A total of $5,967,600 is required for Elementary Education in FY 1975, an increase of $148,200 over FY 1974.

The public elementary school program provides eight years of schooling for the children of Micronesia in a system having 1,053 elementary classrooms in 219 schools with an estimated enrollment of 28,200 by FY 1975. This is an increase from the FY 1974 enrollment of 27,727. Education is compulsory for children of ages 6 through 14 or until the completion of the elementary program. Class sizes vary especially in small schools located on isolated islands. In many of the smaller schools, three or four grades are combined in one class. Due to sociological and geographical conditions it is impractical to consolidate these schools. The curriculum design and development includes language arts, mathematics, social studies, science and health, and homemaking.

A major effort for improvement in teaching capability is being made by restricting new teacher employment to high school graduates. Upgrading is being done by conducting intensive in-service training programs within each district, redesigning projects to support teacher training programs in each district, developing standardized approaches for curriculum design for Micronesia, shifting and redesigning organizational structures, starting programs to strengthen the supervisory and administrative support throughout Micronesia, and more effective recruitment. Additionally, special training programs at the East-West Center in Hawaii for Micronesian administrators and supervisors will be continued.

The development and adoption of curriculum materials that are culturally and geographically oriented to Micronesia has increased to the point where districts can expect prototype copies of curriculum materials for use in five grades of science and five grades of mathematics. Three years of bilingual/vernacular reading materials specifically developed for Micronesia will be available for the opening of school in September 1974.

In FY 1975, seventeen U.S. and thirty Micronesian positions are eliminated.

Staffing:	FY 1974	FY 1975
	2 U.S. Civil Service	- 0 - U.S. Civil Service
	30 U.S. Contract	15 U.S. Contract
	32 U.S. Total	15 U.S. Total
	1,417 Micronesians	1,387 Micronesians

The increase of $148,200 will provide for normal salary increments of $293,900 and for full year funding of new salary schedules and transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, $484,100. These increases are partially offset by the elimination of seventeen U.S. positions, $221,600, and thirty Micronesian positions, $120,200; and by reduced requirements for travel, $11,600; supplies, $190,800; equipment, $62,000; and other costs, $23,600.

c. Secondary:

FY 1974 $3,792,600, FY 1975 $3,544,100: Decrease $248,500

A total of $3,544,100 is required for Secondary Education in FY 1975, a decrease of $248,500 from FY 1974.

The secondary school program normally provides four years of schooling in grades nine through twelve, though there is an emerging pattern of Junior High School and Post-Elementary Schools in at least three districts: Yap, Truk, and Marianas. A total of about 6,000 public enrollment in grades 9-12 is expected in FY 1975, an increase of 362 compared to the FY 1974 enrollment of 5,638. In the three eastern districts, the lack of either dormitory and/or instructional facilities make it necessary to limit enrollment on a selective basis. During FY 1975, limitations on enrollment will continue in spite of accelerated facility construction. Some of the public secondary schools provide dormitory accommodations, and the percentage of dormitory students ranges from 0% to approximately 80% for those schools located in district centers and is about 82% at Outer Islands High School in Yap District. The secondary schools that do not have dormitory facilities are on Saipan where students from other islands in the Marianas live in private homes under a student support program and in Yap proper where secondary students are bused. In other districts significant numbers of students also come to the district centers and live in private homes.

The instructional program in the secondary schools has been largely one of general education, but is being reevaluated for making changes which will meet Micronesian values and needs. It presently includes communication skills, arithmetic and basic mathematics, social studies, and physical and biological science at the introductory levels. In these general high schools, agriculture, industrial education, carpentry, boat and auto mechanics, electricity, drafting, homemaking, business (general business, typing, bookkeeping, business arithmetic, office practice) and physical education are included to a greater or lesser extent, dependent upon the availability of instructional staff and plant facilities at any one school. The achievement level of students is not equivalent to that found in the average secondary school in the United States, and generally ranges from three to five years below achievement levels based on U.S. standardized tests.

In FY 1975, thirty-four U.S. positions are eliminated and twenty-one new Micronesian positions are added.

Staffing:	FY 1974	FY 1975
	3 U.S. Civil Service	3 U.S. Civil Service
	144 U.S. Contract	110 U.S. Contract
	147 U.S. Total	113 U.S. Total
	371 Micronesians	392 Micronesians

The decrease of $248,500 results primarily from the elimination of thirty-four U.S. positions, $361,200, as well as reduced requirements for travel, $7,200; supplies, $148,300; and equipment, $70,100. The decrease is partially offset by the addition of twenty-one new Micronesian positions, $87,700; normal salary increments, $115,400; full year funding of new salary schedules and costs of transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, $129,000; and a net increase of $6,200 in other costs.

d. Scholarship and Medical Education:

FY 1974 $632,800, FY 1975 $632,600: Decrease $200

A total of $632,600 is required for Scholarships in FY 1975, a decrease of $200 from FY 1974.

The Scholarship Office administers a program that provides full and partial scholarships at the University of Guam, University of Hawaii, mainland colleges and universities, various trade and technical schools, as well as schools in Fiji, New Guinea, and the Philippines. A full scholarship includes all costs pertaining to the pursuit of a degree while a partial scholarship may include tuition only, transportation, or such partial help as the student might need. It is expected that 95 full scholarships will be granted in FY 1975. Partial scholarships will furnish limited assistance to an estimated 258 students in FY 1975. This office also coordinates such training programs as are sponsored by World Health Organizations, American Field Service, United Nations Fellowships, East-West Center Scholarships and others that become available.

In FY 1974 the Congress of Micronesia also appropriated $330,000 of local revenues for scholarships. This was distributed to regular full scholarships ($250,000), graduate scholarships ($50,000), and partial scholarships ($30,000). A similar appropriation is anticipated in FY 1975.

There is no change in staff in FY 1975.

Staffing:	FY 1974	FY 1975
	2 U.S. Civil Service	2 U.S. Civil Service
	4 U.S. Contract	4 U.S. Contract
	6 U.S. Total	6 U.S. Total
	4 Micronesians	4 Micronesians.

The decrease of $200 is the net result of increased costs for normal salary increments of $2,700; full year funding of new salary schedules and costs of transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, $800; and reductions in travel, $500; supplies and materials, $2,300; and contractual services, $900.

e. Micronesian Occupational Center:

FY 1974 $868,300, FY 1975 $884,500: Increase $16,200

A total of $884,500 is required in FY 1975 to fund the Micronesian Occupational Center, an increase of $16,200 over FY 1974.

Under the general supervision of the Director of Education, the Director of Micronesian Occupational Center is charged with the responsibility for the administration and supervision of this large Trust Territory-wide vocational school.

The Department of Education continues to place a strong emphasis on training and upgrading Micronesians to meet the challenges of Micronesia for today and for the future. In keeping with that emphasis, Micronesian Occupational Center is entrusted to develop a viable work force in the Trust Territory and coordinate its programs with Economic Development activities to ensure that its graduates are placed in positions for which they are capable, either in the private sector or in governmental agencies.

The Micronesian Occupational Center program offers courses in twenty-two (22) different occupational choices. Included are such vitally needed trades as appliance, automotive, and heavy equipment maintenance and repair, air conditioning, welding, electrical, plumbing, and institutional food preparation and serving. Anticipated enrollment for FY 1975 will be 400, compared to the 309 estimated enrollment for FY 1974, an increase made possible by the completion of the fourth dormitory.

In FY 1975, eight U.S. positions are eliminated and eight new Micronesian positions are added.

Staffing:	FY 1974	FY 1975
	26 U.S. Contract	18 U.S. Contract
	86 Micronesians	94 Micronesians

The increase of $16,200 consists of $25,500 for normal salary increments; $48,200 for full year funding of new salary schedules and costs of transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49; $37,400 for eight new Micronesian positions; $10,900 for additional equipment; and increased requirements of $2,800 for printing and $10,000 for other contractual services. These increases are partially offset by the elimination of eight U.S. positions, $102,900; and decreases of $9,600 in travel and $6,100 in supplies.

f. Community College of Micronesia:

FY 1974 $459,600, FY 1975 $435,700: Decrease $23,900

A total of $435,700 is required for the Community College of Micronesia in FY 1975, a decrease of $23,900 from FY 1974.

The Community College of Micronesia (CCM) is a two-year college specializing at the moment in elementary teacher education. Along with a core of general education, the College offers intensive work in spoken and written English, and courses in academic subjects related to elementary school programs. Principles and methods of teaching, observation, and supervised student teaching in elementary classrooms complete the course of training.

In FY 1974, the Community College of Micronesia will have a total enrollment of 115 full-time students. Enrollment for FY 1975 is not expected to significantly differ. All students at CCM are on scholarship which covers their transportation to and from the school, room and board, and books. Presently, CCM awards the Associate in Science degree in Education. In June 1973, fifty-one (51) graduates were awarded this degree, an increase over the previous year's figure of thirty-five (35).

As part of the Trust Territory Department of Education, the faculty of the Community College is responsible for the planning, programming and budgeting for this two-year institution. Its function can best be described as evolving in a combination of an institute of higher learning capable of A.A. and A.S. programs, a source of consultative personnel, extension services, short-term community support programs and a center for curriculum development.

Specific programs which will be in effect in this time span are:

1. Pre-service elementary teacher program which will graduate fifty (50) or more A.S. students per year.

2. Teacher training program in the area of special education for the mildly handicapped.

3. An operational Instructional Materials Resource Center for use on a Trust Territory-wide basis.

4. Coordination and support services to each district in the development of extension and correspondence courses.

5. Leadership and supervisory training programs for district personnel.

6. Internship training for Micronesians who will become full instructors on the Community College staff.

7. The offering of Liberal Arts Courses as part of the total program leading to an A.A. degree.

8. Development and implementation of other programs as determined by district needs.

There is no change in staff in FY 1975.

Staffing:	FY 1974	FY 1975
	13 U.S. Contract	13 U.S. Contract
	31 Micronesians	31 Micronesians

The decrease of $23,900 includes reduced requirements for travel of $5,000; supplies, $13,600; equipment, $14,000; and reductions in other costs of $26,400. These decreases are partially offset by increases of $12,000 for normal salary increments, and $23,100 for full year funding of new salary schedules and costs of transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49.

g. Micronesian Maritime Center:

FY 1974 $78,600, FY 1975 $55,400: Decrease $23,200

A total of $55,400 is required in FY 1975 for Micronesian Maritime Center, a decrease of $23,200 from FY 1974.

Under the general supervision of the Director of Education and direct supervision of the Director of the Micronesian Maritime Center, this facility will train seamen so that they may obtain positions on board the vessels which ply the waters of the Trust Territory. The Education Department has acquired a fully operational ship to give trainees direct experience and first hand knowledge of maritime work.

The Department of Education places a strong emphasis on training Micronesians for Micronesia in place of bringing in employees from other parts of the world. The vessels which operate in Micronesia are primarily staffed with non-Micronesian employees because there has been no training facility easily available in which the indigenous residents of the Trust Territory could obtain the necessary skills.

Forty new students are enrolled each year replacing the forty graduates that are granted Able Seaman's papers upon completion of the program.

The scope of the program may be expanded in future years to allow other maritime training endeavors at which time additional funds will be required.

There is no change in staff in FY 1975.

Staffing:	FY 1974	FY 1975
	1 U.S. Contract	1 U.S. Contract
	5 Micronesians	5 Micronesians

The decrease of $23,200 includes increases of $400 for normal salary increments; $800 for full year funding of new salary schedules and costs of transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49 which are more than offset by decreased requirements for contractual services, $17,500; supplies, $6,000; and reductions in other costs, $900.

h. Aid to Non-Public Schools:

FY 1974 $212,000, FY 1975 $212,000: Increase $ - 0 -

The amount of $212,000 is required for Aid to Non-Public Schools in FY 1975, the same amount as in FY 1974.

Public Law 3C-36 enacted by the Congress of Micronesia for aid to non-public schools requires the Trust Territory to provide non-public school pupils with benefits equal to those provided to public school students in the areas of transportation, textbooks, accident insurance, testing, medical nursing services, supplies and apparatus, and feeding programs.

The Trust Territory has twenty-five (25) non-public elementary schools with an estimated enrollment of 3,377 students and thirteen (13) non-public Junior and Senior High Schools with an estimated enrollment of 1,577.

The ratio of cost per elementary pupil to cost per secondary pupil in public schools is approximately one to three. This same ratio is used in allocating funds to non-public schools; for every $1 given for elementary pupils, $3 is given for secondary pupils. The individual schools use the funds for the purposes outlined above.

There are no staff members paid from these funds.

3. Public Affairs: FY 1974 $2,632,300, FY 1975 $1,969,600: Decrease $662,700. The decrease consists of:

Increase (+) or Decrease (-)		Total	Total	
Amount	Positions	Program	Positions	Explanation
(1) $ +45,500	...	...	...	Normal salary increments for 10 U.S. and 199 Micronesian ongoing positions.
(2) +84,000	...	...	...	Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51 and costs of transfer allowances authorized by Congress of Micronesia P.L. 4C-49.
(3) -207,200	-3 U.S. -4 Micro	...	...	The high priority of Capital Improvement projects makes it necessary to operate with less staff and tighter allowances for supplies, travel, equipment, grant-in-aid funds, and other support costs.
(4) -135,000	...	...	...	Decrease due to elimination in FY 1975 of Congress of Micronesia Operations and Elections programs.
(5) -450,000	...	...	...	Micronesian Constitutional Convention funded entirely in FY 1974.
$-662,700	-3 U.S. -4 Micro	$1,969,600	10 U.S. 199 Micro	

Cost Factors Involved in Increases

(1) Normal salary increments for ongoing staff of 10 U.S., $2,400; and 199 Micronesians, $43,100.

(2) Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51: Micronesian increase of $81,300 partially offset by a $500 decrease for U.S. Cost of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, $3,200.

(3) Drop three U.S. and four Micronesian positions at a savings of $70,500. Decreases in travel, $17,300; equipment, $16,100; grant-in-aid funds, $91,100; and all other support services, $12,200.

(4) Elimination of partial funding of Congress of Micronesia operations, $125,000. Elimination of Congress of Micronesia Elections program, $10,000.

(5) The Micronesian Constitutional Convention is funded in FY 1974. No budget request is made for FY 1975.

Need for Increase:

(1) Normal salary increments for 10 U.S. and 199 Micronesian ongoing positions, $45,500: Normal within grade increases must be awarded except in the case of unsatisfactory performance. The Micronesian staff is a young staff and the pattern of an older staff higher in grade and in increments retiring and being replaced by youth lower in grade and beginning increments will not be evident for some years to come. An increase of $45,500 is requested to meet these increased pay costs.

(2) Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51 and costs of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, $84,000: New U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51 became effective September 30, 1973. In FY 1975, the new salary schedules will be in effect the full year. The amount of $80,800 is requested to fully fund the new salary schedules. Congress of Micronesia P.L. 4C-49 authorized transfer allowances for U.S. and certain Micronesian employees upon initial recruitment. Those Micronesians recruited to work in other districts than their home district or recruited from other islands in their home district are eligible. Additionally, these same employees are eligible for transfer allowances if later transferred to new duty stations for the convenience of the Government. These costs are additional to those previously involved in recruitment. An increase of $3,200 is requested to fund these transfer allowances.

(3) The high priority of Capital Improvement projects makes it necessary to operate with less staff and tighter allowances for supplies, travel, equipment, grant-in-aid funds, and other support costs, $-207,200: The high priority of needed Capital Improvement projects as expressed repeatedly by the Congress of Micronesia and supported by the Administration makes it necessary to do all possible to hold down rising costs in Operations. A total of 7 positions (3 U.S. and 4 Micronesians) will be dropped in FY 1975 at savings of $70,500. Tighter allowances for supplies, travel, equipment, grant-in-aid funds, and other support costs permit a decrease in the budget request of $136,700.

(4) Decrease due to elimination in FY 1975 of Congress of Micronesia Operations and Elections programs, $-135,000: In FY 1975 the Congress of Micronesia will fully fund the costs of its operations and elections.

(5) Micronesian Constitutional Convention funded entirely in FY 1974, $-450,000: Although funded primarily by the Trust Territory Government, this program will be conducted by the Congress of Micronesia. All funds will be obligated to the Congress of Micronesia in FY 1974.

Activity	FY 1974 Estimate	FY 1975 Estimate	Increase + Decrease -
3. Public Affairs:			
a. Office of the Director	$ 129,500	$ 153,900	$ +24,400
b. Legislative Liaison	156,300	167,800	+11,500
c. Civic Affairs	217,600	217,000	-600
d. Public Information	223,100	217,900	-5,200
e. Broadcasting	352,700	358,400	+5,700
f. Community Development	265,200	242,400	-22,800
g. Grant-in-Aid	452,900	362,200	-90,700
h. Housing Loan Fund	250,000	250,000	- 0 -
i. Congress of Micronesia - Elections	10,000	- 0 -	-10,000
j. Congress of Micronesia - Operations	125,000	- 0 -	-125,000
k. Micronesian Constitutional Convention	450,000	- 0 -	-450,000
Total	$2,632,300	$1,969,600	$-662,700

The Public Affairs Department includes the Divisions of Legislative Liaison, Civic Affairs, Public Information, Broadcasting, Community Development, and the Government Print Shop, which is industrially funded. It is dedicated to the development and improvement of the Micronesian society. Emphasis is placed on the political development of the Territory as well as in the Community Development self-help programs.

a. Office of the Director:

FY 1974 $129,500, FY 1975 $153,900: Increase $24,400

A total of $153,900 is required for the Office of the Director of Public Affairs in FY 1975, an increase of $24,400 over FY 1974.

Under the general supervision of the High Commissioner, the Director of Public Affairs has supervisory responsibility over the Divisions of Civic Affairs, Legislative Liaison, Public Information, Broadcasting, Community Development (including Grant-in-Aid), and the Government Print Shop at Trust Territory Headquarters. The Director is responsible for organizing, planning, directing and coordinating all activities relating to these divisions of the Trust Territory Government. He advises the High Commissioner on policy matters relating to these divisions' activities; and makes continuing appraisal of their effectiveness in the performance of their assigned responsibilities in compliance with applicable law, regulation, policies and procedures. Similar functions are carried out in each of the six districts by a District Director of Public Affairs.

There is no change in staff in FY 1975.

Staffing:	FY 1974	FY 1975
	1 U.S. Civil Service	1 U.S. Civil Service
	9 Micronesians	9 Micronesians

The increase of $24,400 will provide for normal salary increments for ongoing positions of $5,100; full year funding of new salary schedules and costs of transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, $18,300; and increased requirements for all other costs, $1,000.

b. Legislative Liaison:

FY 1974 $156,300, FY 1975 $167,800: Increase $11,500

A total of $167,800 is required to carry on the work of Legislative Liaison in FY 1975, an increase of $11,500 over FY 1974.

Under the general direction of the Director of Public Affairs, the Legislative Liaison Division is responsible for monitoring the Executive Branch bills submitted to the Congress of Micronesia for consideration and advising the High Commissioner, through the Director, of the status of current legislative proposals pending in the Congress. This responsibility entails ascertaining that all interested departments are kept appraised of the status of the 400 or more bills and resolutions introduced every session.

Each year the Division reviews the laws and resolutions adopted/enacted by the Congress of Micronesia and advises the departments and the district administrations of any changes and amendments to the current laws. The Division has been designated as the depository for all official communications for the High Commissioner and is responsible for maintaining up-to-date files of all laws and all executive orders issued by the Secretary of the Interior.

Upon the request by the District Administrations and the District Legislatures, the Legislative Liaison Division participates in the conduct of legislative and municipal workshops, and assists in the drafting of bills and ordinances. The Division monitors the 50 to 60 laws and resolutions which result from every session of each of the six District Legislatures. The functions of the Division are carried out in the districts by Legislative Liaison Offices, each consisting of a staff of three or more personnel. With the policy of decentralization already in effect, there is the ever growing need for headquarters and district staff to meet annually to exchange ideas on district problems and mutually related matters; to assess and evaluate policies and increase understanding of significant political developments as they relate to the problems of the Trust Territory.

The district legislative liaison offices participate in the conduct of municipal, district legislatures, and Congress of Micronesia elections. They recommend to the Election Commissioner members to serve on the District Election Board, and print and distribute election materials and instructions. Headquarters staff provides assistance as may be needed.

In FY 1975, a Micronesian clerk-typist will be added.

Staffing:	FY 1974	FY 1975
	29 Micronesians	30 Micronesians

The increase of $11,500 will provide for one new Micronesian position, $2,000; normal salary increments of $6,400; and full year funding of new salary schedules and costs of transfer allowances as authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, $11,800. These increases are partially offset by reduced requirements for travel, $5,200; equipment, $1,300; and a reduction of $2,200 in other support costs.

c. Civic Affairs:

FY 1974 $217,600, FY 1975 $217,000: Decrease $600

A total of $217,000 is required to support the continuation of the civic/political education and information programs within the Trust Territory in FY 1975, a decrease of $600 from FY 1974.

Under the general supervision of the Director of Public Affairs, the Civic Affairs Division at the Headquarters level is primarily responsible for the planning, developing, and implementing of programs of political education to encourage the people of Micronesia to fulfill their citizenship responsibilities by participating more fully in the affairs of their government at the territorial, district, and municipal levels.

With the future political status of Micronesia its main concern, the Division's efforts in FY 1974 and FY 1975 are devoted to an accelerated program of education for self-government designed to acquaint the Micronesian people with alternative forms of government, the advantages and disadvantages of each, the problems involved in self-government, etc. This program will prepare the people of Micronesia toward the time when they exercise their sovereign right of self-determination by choosing, in a plebiscite, the form of future political status by which they wish to be governed. The program is also designed so that the Micronesian people will be prepared to accept the responsibilities of productive citizenship and participate in their future government.

The Division's activities include the following: assisting district couterparts in conducting research and preparing discussion materials for legislative and municipal officials' workshops or political education conferences; providing advice and assistance to various district legislatures and municipal governments in updating their charters; preparing political education materials; and assisting the Legislative Liaison Division in providing assistance to the district legislative bodies in the conduct of their legislative business.

There is no change in staff in FY 1975.

Staffing:	FY 1974	FY 1975
	16 Micronesians	16 Micronesians

The decrease of $600 results from increases of $47,100 for part time and temporary Micronesian personal services, more than offset by decreases in equipment, $22,400; other services, $11,300; supplies and materials, $10,000; travel, $2,900; and printing, $1,100.

d. Public Information:

FY 1974 $223,100, FY 1975 $217,900: Decrease $5,200

A total of $217,900 is required for the Public Information Division in FY 1975, a decrease of $5,200 from FY 1974.

The Public Information Division is primarily a Headquarters function with its major programs devoted to gathering, evaluating, preparing and disseminating information on a Territory-wide level. In addition, it funds one position (Information Specialist) in four of the Territory's six districts. The district specialists report to the District Administrator; however, this specialist in each district receives advice, assistance and training from Headquarters personnel.

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Furthermore, the Headquarters staff provides assistance to districts in circulating news and other information between the six district broadcast stations and other news media. The Headquarters staff also sends to the districts news and other information produced at Headquarters for district use.

A principal function of the Public Information Division is to develop a network of communication, knowledge and understanding throughout the Territory. This involves daily dispatches to and from the District's radio stations and newspapers, together with a twice-monthly printed review of information for distribution to government employees, students and community leaders. Assistance in the form of writing and graphic presentation of material is given to the Department's political education program. The goal: to provide residents with a complete, pertinent credible information source for news of events and thoughts within their own communities and throughout the Territory, as well as to provide political information material as a foundation for an enlightened citizenry.

As a second function, the Public Information Division must prepare and disseminate information about the Territory to people in the United States and the world community. This is a growing need, not only because of increasing tourism and general interest, but to inform Americans and others about this Pacific Island Territory which is seeking to determine its future political status.

A third function is the preparation and publication of numerous brochures, handbooks and reports, including those to the United Nations and the Secretary of the Interior. Public and press relations are part of another increasingly important departmental activity as there becomes a greater international awareness of Micronesia.

To meet these needs, the following major activities have been programmed:

MICRONESIAN NEWS SERVICE -- A daily, comprehensive, credible report of Micronesia's newsworthy events. Through the Headquarters Public Information Division, this material is gathered and distributed via teletype to district radio stations and newspapers as well as to news media on Guam, and by daily air mail to national press wire services and selected newspapers. Now six years old, MNS has established itself as a responsible source of news and information. It provides a comprehensive report that reaches all regions of the Territory in English and in the vernacular. News service operations have been expanded to include distribution of a weekly tape-recorded summary of news events to the Territory's broadcast stations as well as stations on Guam, Kwajalein and in Hawaii. In addition, limited distribution of a printed version of this weekly summary is carried out.

HIGHLIGHTS -- A twice-monthly newsletter (with special editions as required) from the High Commissioner, with a circulation throughout all districts, among Micronesians outside the Trust Territory and members of the U.S. Congress and others outside Trust Territory. It covers matters of concern to all residents and others interested in the Territory, with emphasis on major activities of the Executive, Legislative and Judicial Branches of the Government.

MICRONESIAN REPORTER -- A quarterly journal of Micronesia, addressing itself to an audience of interested readers within and outside the Territory, reporting developments in politics, society and business, commenting on travel and culture, and providing a forum for expressing a variety of viewpoints concerning the administration, Micronesian legislative bodies, and other forces influencing the direction of the Territory.

Major emphasis in the Division's operations in FY 1975 will be placed on strengthening the various district public information programs. Assistance through training for Information Specialists in the districts will continue to receive priority.

In FY 1975, one U.S. position will be abolished.

Staffing:	FY 1974	FY 1975
	2 U.S. Civil Service	2 U.S. Civil Service
	2 U.S. Contract	1 U.S. Contract
	4 U.S. Total	3 U.S. Total
	15 Micronesians	15 Micronesians

The decrease of $5,200 is the net result of increases for normal salary increments of $6,000; full year funding of new salary schedules and costs of transfer allowances as authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, $7,500; additional travel, $4,700; equipment, $1,600; and the elimination of one U.S. position, $24,700; and reduced requirements in other support costs, $300.

e. Broadcasting:

FY 1974 $352,700, FY 1975 $358,400: Increase $5,700

A total of $358,400 is required for Broadcasting in FY 1975, an increase of $5,700 over FY 1974.

The Broadcast Division of the Public Affairs Department in the Trust Territory consists of six radio stations, one located in each administrative district and a Broadcast and Training Center at Headquarters, which serves as the administrative, training, planning, coordinating, equipment procurement, advisory, and programming office for the entire system.

The Division is responsible for keeping the six broadcast stations on the air for up to 18 hours daily, providing their listeners with news, entertainment, information and educational programs. The stations also serve as a direct communication link between district centers and outlying villages or islands having no other means of communication. During typhoons or other natural disasters the stations often remain on the air around the clock broadcasting information vital to the preservation of life and property.

In FY 1975, Broadcast Division will continue its emphasis on training of radio announcers, news directors, program directors and broadcast station managers and on the production of an increased percentage of programming on all stations which will fulfill the cultural, educational, informational and entertainment needs of the Micronesian people.

In FY 1975, one new Micronesian position will be added and one U.S. position abolished.

Staffing:	FY 1974	FY 1975
	3 U.S. Civil Service	2 U.S. Civil Service
	72 Micronesians	73 Micronesians

The increase of $5,700 will provide for one new Micronesian position, $11,000; normal salary increments, $12,100; and full year funding of new salary schedules and costs of transfer allowances as authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, $21,500. These increases are partially offset by the

elimination of one U.S. position, $21,800; and reduced requirements for travel, $9,000; supplies, $2,500; equipment, $2,100; and other support costs, $3,500.

f. Community Development

FY 1974 $265,200, FY 1975 $242,400: Decrease $22,800

A total of $242,400 is required for Community Development in FY 1975, a decrease of $22,800 from FY 1974.

Under the general supervision of the Director of Public Affairs, this Division seeks to improve Micronesian living by working with individuals, groups, and communities. Community Development programs are aimed at improving the capability of Micronesian individuals and groups to achieve a new social coherence for more effective participation in modern living. Individuals are reached directly through leadership training and community education broadcasting. This Division also coordinates several special federally funded social services programs. Job experience, remedial education and counseling to 131 out-of-school youths is provided by the Neighborhood Youth Corps. An average of 60 youths are regularly receiving practical work skills at the Job Corps in Hawaii. Community groups receive technical guidance in organizing scouting, recreation, women's clubs, community centers, and community wide social activities. In addition, this Division administers a housing program for low-income families.

District level community development workers maintain regular contact with numerous villages and offer a variety of technical services:

Demonstration of improved technology such as wind generators, fiberglass water tanks, salt water distillers, and low-cost construction devices.

Instruction in improved home economics in such areas as sewing, household safety, consumer information, appliance and home maintenance, family budgeting, and nutrition.

Providing of information and guidance to local leaders organizing cooperative or community improvement projects, annual celebrations, or promoting maximum use of local resources for construction of public facilities.

Advisory assistance to women's groups to increase their participation in modern community affairs.

This Division is also responsible for assisting in the coordination of Red Cross aid to disaster stricken areas. It works in close cooperation with OEO programs and the Peace Corps. Assistance to elderly Micronesians is provided through this Division's Office on Aging, an HEW funded program. A comprehensive youth services program also funded by HEW is recently underway. Finally, this Division operates a 250 title film library for use by public and community service agencies.

In FY 1975, one U.S. and four Micronesian positions will be abolished.

Staffing:	FY 1974	FY 1975
	3 U.S. Civil Service	2 U.S. Civil Service
	1 U.S. Contract	1 U.S. Contract
	4 U.S. Total	3 U.S. Total
	42 Micronesians	38 Micronesians

The decrease of $22,800 consists of the elimination of one U.S., $21,900, and four Micronesian positions, $10,400; and reduced requirements for travel, $5,000; equipment, $5,500; and other support costs, $900. These decreases are partially offset by the $8,100 increase for normal salary increments, and $12,800 for full year funding of new salary schedules and costs of transfer allowances as authorized by Congress of Micronesia Public Laws 5-51 and 4C-49.

g. Grant-in-Aid:

FY 1974 $452,900, FY 1975 $362,200: Decrease $90,700

A total of $362,200 is required for the Grant-in-Aid program in FY 1975, a decrease of $90,700 from FY 1974.

The Grant-in-Aid program, supervised by local Community Development Offices, assists Micronesian communities, usually remote or outer-island villages in carrying out self-help projects. These projects are initiated by the local communities which provide cash, local materials and land as a matching contribution to the Government's cash grant. Projects include copra work boats, bridges, seawalls, water supply systems, warehouses, electrical power, community sawmills, ice machines, municipal buildings and recreation facilities.

In FY 1973, over 70 projects were awarded grants. The Government's contribution was $343,772; the communities' contributions in cash and/or in kind totaled $143,400. In FY 1974, $357,900 is available for grants. In FY 1975, funds available for grants are reduced by $91,100 to a total of $266,800.

In FY 1975, two Micronesian positions will be abolished.

Staffing:	FY 1974	FY 1975
	1 U.S. Civil Service	1 U.S. Civil Service
	20 Micronesians	18 Micronesians

The decrease of $90,700 includes a $91,100 reduction in the funds available for grants, $4,700 from the elimination of two Micronesian positions, and a slight decrease in all other support costs of $3,700. These are partially offset by the $3,300 increased costs for normal salary increments and $5,500 for full year funding of new salary schedules and costs of transfer allowances as authorized by Congress of Micronesia Public Laws 5-51 and 4C-49.

h. Housing Loan Fund:

FY 1974 $250,000, FY 1975 $250,000: Increase - 0 -

A total of $250,000 is requested for the Housing Loan Fund Program in FY 1975, the same amount as FY 1974.

The Low-Cost Housing Loan Fund continues to provide seed capital to the six district housing authorities to generate increased local interest in improved housing for low-income Micronesian families.

As a result of such efforts since FY 1971, the Congress of Micronesia passed the Community Housing Act of 1973, a major step toward creating the uniform organization and management infrastructure needed for further growth of the program.

In addition, the district Housing Authorities now have 265 loans outstanding. There is also evidence of a marked increase in understanding by community leaders of the need for decent, safe and sanitary housing for all Micronesians.

An equal share of the housing loan fund is distributed to each of the six districts.

i. Congress of Micronesia - Elections:

FY 1974 $10,000, FY 1975 $ - 0 -: Decrease $10,000

No funds are requested in FY 1975 for Congress of Micronesia - Elections.

In FY 1975 the Congress of Micronesia will fund the costs of elections from its locally generated revenues.

j. Congress of Micronesia - Operations:

FY 1974 $125,000, FY 1975 $ - 0 -: Decrease $125,000

No funds are requested in FY 1975 for Congress of Micronesia - Operations.

In FY 1975 the Congress of Micronesia will fully fund the costs of its operations from its locally generated revenues.

k. Micronesian Constitutional Convention:

FY 1974 $450,000, FY 1975 $ - 0 -: Decrease $450,000

No funds are requested in FY 1975 for the Micronesian Constitutional Convention.

4. Resources and Development: FY 1974 $5,524,000, FY 1975 $7,764,500: Increase $2,240,500. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $ +136,100	...	...	...	Normal salary increments for 67 U.S. and 709 Micronesian ongoing positions.
(2) +258,200	...	...	...	Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51, costs of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, and of positions partially lapsed in FY 1974.
(3) +2,093,700	-1 U.S. +2 Micro	...	...	Full implementation of accelerated Lands and Surveys program on public lands.
(4) -247,500	-4 U.S. -5 Micro	...	...	The high priority of Capital Improvement projects makes it necessary to operate all Divisions except Lands and Surveys with tighter allowances for equipment, contractual services, travel and other support costs.
$+2,240,500	-5 U.S. -3 Micro	$7,764,500	67 U.S. 709 Micro	

Cost Factors Involved in Increases

(1) Normal salary increments for ongoing staff of 67 U.S., $34,600, and 709 Micronesians, $101,500.

(2) Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51: U.S., $36,400, and Micronesians, $188,800. Cost of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, $24,400. Full funding of positions partially lapsed in FY 1974, $8,600.

(3) Increases in contractual services, $2,061,200; travel, $27,900; supplies and materials, $54,700; and in personal services for two (net) additional Micronesian positions, $1,600. Partially offset by decreases in equipment, $43,500; other object classes, $700; and in U.S. personal services due to the elimination of one position, $7,500.

(4) Four U.S. positions eliminated at a savings of $43,300, and five Micronesian positions dropped with savings of $9,600. Decreases in travel, $26,100; contractual services, $102,500; and equipment purchases, $86,100. Partially offset by an increase in all other support services, $20,100.

Need for Increase:

(1) Normal salary increments for 67 U.S. and 709 Micronesian ongoing positions, $136,100: Normal within grade increases must be awarded except in the case of unsatisfactory performance. The Micronesian staff is a young staff and the pattern of an older staff higher in grade and in increments retiring and being replaced by youth in lower grade and beginning increments will not be evident for some years to come. An amount of $136,100 is requested to meet these increased pay costs.

(2) Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51, costs of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, and of positions partially lapsed in FY 1974, $258,200: New U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51 became effective September 30, 1973. In FY 1975 the new salary schedules will be in effect the full year. The amount of $225,200 is requested to fully fund the new salary schedules. Congress of Micronesia P.L. 4C-49 authorized transfer allowances for U.S. and certain Micronesian employees upon initial recruitment or upon transfers. These costs are additional to those previously involved in recruitment. An increase of $24,400 is requested to fund these transfer allowances. A few positions for which recruitment was delayed in FY 1974 will require full funding in FY 1975. The amount of $8,600 is requested to fully fund these positions.

(3) Full implementation of accelerated Lands and Surveys program on public lands, $2,093,700: On October 5, 1973, the Secretary of the Interior gave his approval to a plan calling for an early return to local title and control of so-called public lands in the Trust Territory of the Pacific Islands. The basis for his decision was extensive study in the field and in Washington by the Office of Territorial Affairs and the Office for Micronesian Status Negotiations. In order to effect this land return in as just a manner as possible, the Secretary felt that an accelerated land and survey effort on all lands claimed by the Trust Territory Government must be undertaken quickly in order to facilitate completion of the status negotiations. In the FY 1974 First Supplemental, $800,000 was appropriated for that purpose. A major part of the work is scheduled for FY 1975 and an increase of $2,093,700 is requested to continue the program.

(4) The high priority of Capital Improvement projects makes it necessary to operate all Divisions except Lands and Surveys with tighter allowances for equipment, contractual services, travel and other support costs, $-247,500: The high priority of needed Capital Improvement projects as expressed repeatedly by the Congress of Micronesia and supported by the Administration makes it necessary to do all possible to hold down rising costs in Operations. In this budget staffing has been cut slightly. Four U.S. and 5 Micronesian positions are dropped with savings of $52,900. Tighter allowances for contractual services, travel, and other support costs, along with a significant drop in nonrecurring equipment purchases permit a decrease in the budget request of $194,600. All divisions in Resources and Development are affected except Lands and Surveys.

Activity	FY 1974 Estimate	FY 1975 Estimate	Increase + Decrease -
4. Resources and Development:			
a. Office of the Director	$ 94,000	$ 104,100	$ +10,100
b. Agriculture	1,547,900	1,550,900	+3,000
c. Economic Development	568,000	564,600	-3,400
d. Marine Resources	602,800	571,000	-31,800
e. Lands and Surveys	2,630,500	4,891,700	+2,261,200
f. Labor Division	80,800	82,200	+1,400
Total	$5,524,000	$7,764,500	$+2,240,500

Under the general supervision of the Director of Resources and Development, this organizational element is responsible for the development, conservation, and management of the Trust Territory's natural and human resources. It is composed of the divisions of Agriculture, Economic Development, Marine Resources, Lands and Surveys, and Labor.

a. Office of the Director:

FY 1974 $94,000, FY 1975 $104,100: Increase $10,100

A total of $104,100 is required to operate the Office of the Director in FY 1975, an increase of $10,100 over FY 1974.

The principal function of the Office of the Director is the coordination and supervision of the various resources and development programs of the Trust Territory, including the furnishing of services and assistance to the people of the Territory in the areas of business development, fisheries, agriculture, labor, industries, foreign investment, tourism, and lands and surveys. The Director also serves as an advisor to the High Commissioner on all matters concerning the economic development of Micronesia.

Staffing:	FY 1974	FY 1975
	1 U.S. Civil Service	- 0 - U.S. Civil Service
	1 U.S. Contract	2 U.S. Contract
	2 U.S. Total	2 U.S. Total
	4 Micronesians	4 Micronesians

The increase of $10,100 will provide $4,700 for normal salary increments, $12,100 for full year funding of new salary schedules and transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, and increases of $6,300 for travel, and $2,000 for supplies. These increases are partially offset by the savings due to shifting one key civil service to contract, $12,500; and a net reduction of $2,500 in other costs.

b. Agriculture:

FY 1974 $1,547,900, FY 1975 $1,550,900: Increase $3,000

A total of $1,550,900 is required for Agriculture in FY 1975, an increase of $3,000 over FY 1974.

The basic function of the Division of Agriculture is to provide technical assistance to farmers in the form of training, technical advice and information, education, and extension services. Given the proper technical assistance the farmer is encouraged to produce principally to neutralize imports and subsequently export where feasible. The changes in demand and taste necessitate a certain change of emphasis from a subsistence level of agriculture development to a more commercialized caliber.

Crop and livestock promotion programs take the bulk of the operating funds of the Agriculture Division. This includes coconut rehabilitation and planting in the Marshalls, Truk, Ponape and outer islands of Yap. The coconut program involves on-the-farm advice in thinning groves to an optimum of 70 palms per acre, replanting senile groves,planting new areas, organization of copra producers cooperatives, developing warehousing and transportation systems, and education and training of farmers in new techniques of culture and marketing of copra. The aim is to rehabilitate and/or replant approximately 4,000 acres of coconut land in these areas.

The cattle, hog and poultry programs involve the production of beef, pork and eggs in the Marianas for domestic use and export to Guam; production of poultry products and pork in all districts for domestic use to offset imports. To achieve the projected production goal, this activity operates and maintains 250 acres of grazing, feed grass improvement areas, and beef, hog and poultry breeding and rearing facilities and stock. It demonstrates pasture improvement techniques and provides bulldozer service for pasture land clearing at a nominal cost.

The livestock program also operates three USDA approved slaughterhouses which are used by the ranchers. Through the Poultry Management Specialist, on-the-farm advice for economical poultry units of a minimum of 1,000 layers is a continuing program until local demand for eggs is met.

Veterinary medical, surgical and preventive medicine will continue to be offered to all livestockmen. It will also provide meat inspection and animal quarantine inspection to protect the public health and agricultural economy.

Vegetable production program's goal is to neutralize imports and reduce cash outflow by increasing food production in all districts to fulfill local demand. Production in the Marianas (because of irrigation and better growing conditions) will be to fulfill local demand and for export to Guam.

Ponape Island black pepper production is expected to increase. Additional plantings will be encouraged with progressive and aggressive farmers. Banana production for export to the Marshalls or Guam markets will also increase. Continuous extension service will be provided to the vegetable, fruit and livestock farmers. Also production inputs of machinery, fertilizer and insecticides as well as marketing facilities will be improved.

The Entomological Service provides technical advice and direction for controlling and/or eradicating pests. In FY 1975, specific biological control programs against the coconut rhinoceros beetle, brown coconut scale and fluted scale will be continued.

The Conservation Service program is concerned with terrestrial conservation including soil, water, range, forest and wildlife. Efforts will be devoted to participation in school programs, the production of posters, news media and radio broadcasts to inform and make the public become more aware of the fact that conservation is everybody's business.

The Plant Pathology Service is another program for the purpose of research, prevention and control of plant diseases of vegetables, bananas, black pepper, breadfruit, citrus and tuber crops.

The Forestry Service activities include planting selected trees on private and government forest lands; nursery maintenance and plant distribution; watershed establishment; parks and recreation; and wood utilization and research.

Staffing:	FY 1974	FY 1975
	10 U.S. Civil Service	9 U.S. Civil Service
	6 U.S. Contract	6 U.S. Contract
	16 U.S. Total	15 U.S. Total
	278 Micronesians	271 Micronesians

The net increase of $3,000 results from increases of $40,800 for normal salary increments, $75,000 for full year funding of new salary schedules and transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49. Further increases result from promotions for a few selected positions, $2,500; from an increase in supplies and materials, $21,200; and from full year funding of one position partially lapsed in FY 1974, $3,600. Almost entirely offsetting the increases are reductions of $13,700 in travel, $10,000 in freight, $34,400 in other services, and $55,200 in equipment, as well as a decrease in salaries due to the elimination of one U.S. position, $10,200, and seven Micronesian positions, $16,600.

c. Economic Development:

FY 1974 $568,000, FY 1975 $564,600: Decrease $3,400

A total of $564,600 is required for Economic Development in FY 1975, a decrease of $3,400 from FY 1974.

The functional responsibilities of the Headquarters and District Economic Development Division focus on three interrelated areas, namely:

a) promotion and development of private business enterprise including cooperative and credit union, tourism and private foreign investment,

b) provision of needed management and business advisory services to the Micronesian business communities, including specialized assistance in the preparation of re-investment and marketing studies, and

c) provision of administrative and technical support to the Economic Development Loan Fund (EDLF) and the District Economic Development Boards in administering the Government-and Congress of Micronesia-funded EDLF loan programs and in regulating the activities of private foreign investors in the Trust Territory. Liaison with the Small Business Administration is the responsibility of the Headquarters Economic Development Division as well as any investment promotional activities outside the Trust Territory.

Micronesia's economic situation today is portrayed as being a dual economy, having over 50% of its 110,000 population receiving sustenance primarily from subsistence fishing and farming (many as copra cutters). The people living at or near the administrative district centers, approximately 37% of the population, live mostly on private and government employment and are highly dependent upon foods and other basic necessities imported from abroad. The cost of living in these islands appears to have a direct relationship to the rising price of imported goods, thus the demand for higher wages to compensate for the price increases. The inordinate imbalances between import and export over the years have been a major concern, and this situation further exemplifies the need to continue the business advisory program which has been launched in the districts in order to provide short-time management and business consultant services to local entrepreneurs--from organizing a business to getting it operating effectively.

In FY 1973, Tourism earned roughly $3.5 million with some 47,000 visitors. By 1975, accommodations and plans permitting, it is estimated that the inflow of tourism into the Trust Territory will reach in excess of 80,000 annually, bringing potential expenditures to more than $6 million. Effort will continue in educating the Micronesian people in all aspects of tourism, assisting the district Tourist Commissions in the formulation, promotion and development of their district tourism programs; conducting basic research; and disseminating informative and descriptive materials on Micronesia. The Headquarters Economic Development Division's Tourism Branch will continue to supplement promotional and advertising activities now largely carried on by carriers, hotels, and travel agents, and will continue to interest and assist entrepreneurs into entering hotel/motel businesses and related tourism enterprises such as charter fishing, specialty shops and handicraft production.

In promoting private foreign investment (U.S. only) the Headquarters Economic Development Division will continue to educate the Micronesian people of the importance of augmenting domestic resources through regulated introduction of desirable outside capital and expertise. In this regard, continued emphasis will be made to provide technical support and guidance to the six District Economic Development Boards in their efforts to regulate and promote desirable investment requiring outside capital and expertise. There is presently in Micronesia about $50 million worth of private U.S. investment. Since the implementation of the Foreign Investors Act in 1970, about 150 applications to do business have been received: 64 approved; 23 disapproved; the rest have been withdrawn or are under consideration by the District Boards.

The Economic Development Division is also responsible for providing technical assistance, on a continuing basis, to some 91 chartered cooperatives and credit unions operating in all six districts of the Territory. Headquarters and District Economic Development staffs provide short-term consultation on cooperative/credit union business management, setting up double-entry bookkeeping, establishing appropriate training programs and supplying educational materials to these organizations. An additional responsibility of the cooperative and Credit Union personnel is to provide technical support to the District Fisheries Authorities which have recently been created by the Congress of Micronesia in each district to encourage fish production by fishing cooperatives. As of December 31, 1972, roughly 12,500 Micronesians were members of a cooperative. Credit unions throughout the Territory have over 11,000 members. The members investment in these organizations must be protected so as to encourage a continuity of their services to the island communities. It should be noted that the participation of Micronesians in the cooperatives and credit unions throughout the Territory represent over 10 percent of the Territory's population.

Staffing:	FY 1974	FY 1975
	5 U.S. Civil Service	5 U.S. Civil Service
	6 U.S. Contract	6 U.S. Contract
	11 U.S. Total	11 U.S. Total
	48 Micronesians	49 Micronesians

The decrease of $3,400 results from reductions of $14,200 in travel, $9,100 in printing, $18,100 in other services, and $8,900 in equipment purchases which are partially offset by the $11,800 increase for normal salary increments, $27,600 for the new salary schedules and transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, $6,800 for a new Micronesian position and an additional $700 for supplies.

d. Marine Resources:

FY 1974 $602,800, FY 1975 $571,000: Decrease $31,800

A total of $571,000 is required for Marine Resources in FY 1975, a decrease of $31,800 from FY 1974.

Under the general direction and supervision of the Director of the Department of Resources and Development, the Marine Resources Division is charged with the responsibility for the development and management of a Trust Territory-wide program in marine resources. The Division determines the overall content and general direction of district programs and functions from that point forth in an advisory and supportive capacity. The major involvement of the Division includes the conservation, protection, and utilization of plants and animal species; the suppression of illegal harvesting; the promotion and technical development of both inshore and offshore commercial fisheries; the design, building, and drydocking of commercial utility and sports craft; the applied development of methods for the selection and use of species valuable for commercial mariculture production; and the training and certification of Micronesian divers used in starfish control and environmental protection programs. These responsibilities are carried out through a Headquarters office in Saipan, the Micronesian Mariculture Demonstration Center in Palau, and District Marine Resources offices in Truk, Ponape, Palau, and Yap.

In FY 1975, planning will be initiated in the Marshalls District in preparation for programs which are scheduled for FY 1976. Offshore tuna fisheries will be initiated and supported in conjunction with private enterprise, and the boats and necessary equipment will be designed. Feasibility studies will be made in areas of fish farming and related mariculture programs. The public will be made aware of conservation practices and problems and a conservation master plan will be developed.

Continuing Headquarters Programs include the Micronesian Mariculture Demonstration Center. A newly developed capability for marine engineering and marine architectural design services is being utilized to reinforce district planning in the various areas of marine resources. Headquarters now has the capability to design, build, and drydock boats, as well as other marine-related support facilities to meet specific district needs.

In Ponape, dockside facilities development awaits landfill completion, while offshore fishing is being developed through a dory building project. During fiscal year 1974, seven to eight dories will have been put into active offshore fishing service.

Staffing:	FY 1974	FY 1975
	2 U.S. Civil Service	2 U.S. Civil Service
	12 U.S. Contract	10 U.S. Contract
	14 U.S. Total	12 U.S. Total
	62 Micronesians	63 Micronesians

The decrease of $31,800 results from a $50,300 decrease in other services, reductions of $21,900 in equipment purchases, $7,500 in other costs, and savings from the elimination of two U.S. positions, $10,600. These are partially offset by increases of $14,100 to fund normal salary increments and one new Micronesian position; $26,400 for the new salary schedules and transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49. An additional increase of $18,000 is also needed to make up for the loss of reimbursable work performed in FY 1974.

e. Lands and Surveys:

FY 1974 $2,630,500, FY 1975 $4,891,700: Increase $2,261,200

A total of $4,891,700 is required for Lands and Surveys in FY 1975, an increase of $2,261,200 over FY 1974.

Under the general supervision and direction of the Director of Resources and Development, the Division of Lands and Surveys performs a variety of both public land management and private land title registration services for the Trust Territory Government and the people of Micronesia.

The Division is responsible for four programs:

(1) Land Cadaster Program - in conjunction with the Land Commissions, investigating, determining, and registering the title of all land parcels.

(2) Surveying and Mapping Program - surveying, monumenting, and mapping the boundaries of each parcel of land.

(3) Land Resources Program - inventorying the use capability and resources of all land units as they are surveyed.

(4) Real Property Management Program - coordinating the acquisition of private lands for public use and benefit and the homesteading or leasing of public lands; investigating property damage claims; reviewing non-citizen leases of Micronesian lands; and determination of land values.

The program as now structured commenced on January, 1970. Between that date and July 31, 1973, boundaries of 3,886 parcels have been surveyed, monumented and mapped; preliminary title inquiries affecting 5,517 parcels have been held; formal hearings leading to final determination of 4,063 parcels have been held; provisional title has been issued for 2,630 tracts; and 31,881 land records have been secured, microfilmed, examined and translated (when necessary). Generalized land use capability surveys have been completed for the four principal islands in the Mariana Islands; a territory-wide survey of historic and cultural sites has been completed; 378 homesteading deeds have been issued; and the titles to 482 parcels have been cleared and certified as being available for the Capital Improvements Program.

In FY 1974, a study made by the Office for Territorial Affairs and the Office for Micronesian Status Negotiations showed that the people in the districts wanted the public lands in the districts turned over to the control of the districts before the termination of the Trusteeship agreement. A policy statement on the transfer of public lands to the districts, issued by the United States Government in November, 1973, assigned the responsibility for implementation of the policy to the High Commissioner of the Trust Territory, with instructions and guidance to be provided by the Department of the Interior.

In FY 1974, an outline for the plan for conducting the work was developed by the staff of the Division of Lands and Surveys. This plan will be refined and made applicable to the continuation of the work as experience is gained in contracting survey work by means of aerial photographs and photogrammetric techniques together with conventional ground surveys to be used where photogrammetry is not adequate for a complete survey. Funds appropriated in the FY 1974 First Supplemental provided for the initial stage of the work. Funds requested in FY 1975 will cover the major portion of the task. It is anticipated that further amounts will be requested in FY 1976 and FY 1977 with completion scheduled for 1977.

Staffing:	FY 1974	FY 1975
	8 U.S. Civil Service	8 U.S. Civil Service
	20 U.S. Contract	19 U.S. Contract
	28 U.S. Total	27 U.S. Total
	305 Micronesians	307 Micronesians

The increase of $2,261,200 provides for normal salary increments of $59,500; full year funding of new pay schedules and for transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, $103,000; full year funding of positions partially lapsed in FY 1974, $5,000; and for two new Micronesian positions, $1,600. Contractual services are increased in the amount of $2,061,200; travel increases $27,900; and supplies and materials, $54,700. These increases are partially offset by decreases in equipment, $43,500; in U.S. personal services due to the elimination of one position, $7,500; and minor amounts totaling $700 in other object classes.

f. Labor Division:

FY 1974 $80,800, FY 1975 $82,200: Increase $1,400

A total of $82,200 is required for the Labor Division in FY 1975, an increase of $1,400 over FY 1974.

Under the general supervision of the Director of the Resources and Development Department, the Labor Division administers the Protection of Resident Workers Act in the Trust Territory. This involves regulation and control of labor contracts and of importation of alien workers; the establishment of public employment service offices for resident workers; administration of all manpower programs; and other matters related to working conditions and employment, including accident and health reports, investigations of complaints, hearings, etc.

Headquarters operations are supervised by the Chief of Labor. The Chief of Labor is responsible for promulgation of rules and regulations for control of alien workers seeking to enter the Trust Territory to work in the private sector only as needed and when qualified Micronesian workers are not available.

The Division of Labor conducts continual surveys to determine job opportunities, training program needs, and manpower resources. Counseling services are provided. Quarterly reports on all alien workers, accident and health reports, payroll information, etc., are filed in accordance with recent legislation.

Staffing:	FY 1974	FY 1975
	1 U.S. Contract	- 0 - U.S.
	15 Micronesians	15 Micronesians

The $1,400 increase will provide for normal salary increments, $2,900; full year funding of new salary schedules authorized under Public Law 5-51, $5,500; and increased travel and equipment requirements, $4,500. These increases are partially offset by the elimination of one U.S. position, $10,000, and minor reductions in printing, $800; supplies, $500; and other services, $200.

5. Protection to Persons and Property: FY 1974 $2,404,200, FY 1975 $2,645,800: Increase $241,600. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$ +92,700	...	...	...	Normal salary increments for 27 U.S. and 409 Micronesian ongoing positions.
(2)	+225,800	...	...	...	Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51, costs of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, and of positions partially lapsed in FY 1974.
(3)	-83,500	-1 U.S. +2 Micro	...	...	Minor change in staffing in the Division of Public Safety as well as reduced requirement for educational travel and nonrecurring equipment purchases.
(4)	+6,600	-1 U.S. +1 Micro	...	...	Replacement of a U.S. clerk typist by a Micronesian plus minor changes in other program areas.
	$+241,600	-2 U.S. +3 Micro	$2,645,800	27 U.S. 412 Micro	

Cost Factors Involved in Increases

(1) Normal salary increments for ongoing staff of 27 U.S., $7,500, and 409 Micronesians, $85,200.

(2) Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51: U.S., $37,200, and Micro-

nesians, $154,400. Cost of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, $7,600. Full year funding of positions partially lapsed in FY 1974, $26,600.

(3) In the Division of Public Safety, eliminate one U.S. position at $21,500, partially offset by the addition of two Micronesian positions at $4,200. Further Public Safety decreases for travel, $20,900; supplies, $12,900; equipment purchases, $25,300; and all other support costs, $7,100.

(4) In other program areas, increases for contractual services, $4,700, and supplies and materials, $8,200, are partially offset by a decrease of $2,600 in all other supporting costs, as well as by savings of $3,700 resulting from replacement of a U.S. position by a Micronesian position.

Need for Increase:

(1) Normal salary increments for 27 U.S. and 409 Micronesian ongoing positions, $92,700: Normal within grade increases must be awarded except in the case of unsatisfactory performance. The Micronesian staff is a young staff and the pattern of an older staff higher in grade and increments being replaced by youth in lower grade and beginning increments will not be evident for some years to come. An increase of $92,700 is requested to meet these increased pay costs.

(2) Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51, costs of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, and of positions partially lapsed in FY 1974, $225,800: New U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51 became effective September 30, 1973. In FY 1975 the new salary schedules will be in effect the full year. The amount of $191,600 is requested to fully fund the new salary schedules. Congress of Micronesia P.L. 4C-49 authorized transfer allowances for U.S. and certain Micronesian employees upon initial recruitment. These costs are additional to those previously involved in recruitment. An increase of $7,600 is requested to fund these transfer allowances. Those positions for which recruitment was delayed in FY 1974 will require full funding in FY 1975. The amount of $26,600 is requested to fully fund these positions.

(3) Minor change in staffing in the Division of Public Safety as well as reduced requirement for educational travel and nonrecurring equipment purchases, $-83,500: The elimination of one U.S. Civil Service position at $21,500 and the addition of two Micronesian positions at $4,200 reduces personnel costs by $17,300. Educational travel involved in the training of police will be reduced $20,900 and nonrecurring equipment purchases will be reduced $25,300. Other reductions, primarily in supplies and contractual services account for a further reduction of $20,000.

(4) Replacement of a U.S. clerk typist by a Micronesian plus minor changes in other program areas, $6,600: Replacement of a U.S. Contract position by a Micronesian position will reduce personnel costs by $3,700 in the Office of the Attorney General. Increases in contractual services, $4,700, and supplies and materials, $8,200, are partially offset by reductions in other cost areas of $2,600.

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Activity	FY 1974 Estimate	FY 1975 Estimate	Increase + Decrease -
5. Protection to Persons and Property:			
a. Office of the Attorney General	$ 456,100	$ 510,300	$ +54,200
b. Immigration	124,300	133,200	+8,900
c. Public Safety	1,287,700	1,373,900	+86,200
d. Public Defender	276,100	325,300	+49,200
e. Local Judiciary	260,000	303,100	+43,100
Total	$2,404,200	$2,645,800	$+241,600

a. Office of the Attorney General:

FY 1974 $456,100, FY 1975 $510,300: Increase $54,200

A total of $510,300 is required for the Office of the Attorney General in FY 1975, an increase of $54,200 over FY 1974.

The Attorney General's Office (excluding Immigration and Public Safety) is responsible for carrying out the legal and law enforcement programs of the Trust Territory Government. The office provides the legal services required by the Government and renders legal opinions when requested by the High Commissioner or other officials of the Trust Territory Government and represents the Government in all litigation in which the Government is a party or has any interest, including the prosecution of all criminal cases. The office has overall responsibility for the administration of all Trust Territory contracts. It drafts or reviews all legislation proposed by the Executive Branch of the Government and reviews and recommends Executive actions on all acts passed by the Congress of Micronesia. It also testifies on most of the legislation before the Congressional committees.

The Trust Territory Government must be involved in providing the above described legal services as there are no local resources to provide same. The Public Defender's Office, the Peace Corps Volunteer lawyer program and the OEO Legal Services Program do not provide a substitute for said services.

The goal of the Attorney General's Office is to meet the challenge, the need for increased legal services due to the rapid development of Micronesia, in both governmental and private sectors. The immediate and accurate response to requests for legal services must be continued to insure that the proper legal approach is taken by the Government. In FY 1975 the program of the Office of the Attorney General will continue at the existing level.

Staffing:	FY 1974	FY 1975
	3 U.S. Civil Service	3 U.S. Civil Service
	14 U.S. Contract	13 U.S. Contract
	17 U.S. Total	16 U.S. Total
	20 Micronesians	21 Micronesians

The increase of $54,200 provides $7,100 for normal salary increments; $43,800 for full year funding of new salary schedules and transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49; $2,000 for an additional Micronesian position; and for small increases of $1,100 in printing, $2,900 in

other services, $3,700 in supplies and materials, and $600 in other costs. The abolishment of one U.S. position, $5,700, and a $1,300 decrease in equipment needs partially offset the increases.

b. Immigration:

FY 1974 $124,300, FY 1975 $133,200: Increase $8,900

A total of $133,200 is required for Immigration in FY 1975, an increase of $8,900 over FY 1974.

Under the general supervision of the Attorney General, the Immigration Division administers and controls the entrance, movement and departure of persons, vessels, and aircrafts in the Trust Territory. Rules, regulations, and operational instructions are established and promulgated for execution by personnel at Headquarters and the six District Immigration Offices. The Immigration Offices are also responsible for applications and issuance of Trust Territory passports and provide the back up work for the United States Consular functions.

The number of persons making applications to enter the Trust Territory for purposes of tourism, business, employment, etc., has substantially increased. Over 40,000 entries were made in calendar year 1972. The number of alien workers has reached the 1,500 figure. In FY 1973 the Mariana Islands District alone witnessed over 1,310 aircraft entries, and 131 vessels. The increase in number of entries is expected to grow at a significant rate during FY 1975 when airports, hotels, and tourist accommodations that are now under construction are completed.

Our goal is an effective and efficient control of all entries and movements of persons, aircrafts and vessels in the Trust Territory.

Staffing:	FY 1974	FY 1975
	24 Micronesians	24 Micronesians

The increase of $8,900 will provide for normal salary increments, $5,000, and $9,700 for full year funding of new salary schedules authorized by Congress of Micronesia Public Law 5-51. Decreases of $4,600 in travel and $1,200 in other costs partially offset the increases.

c. Public Safety:

FY 1974 $1,287,700, FY 1975 $1,373,900: Increase $86,200

The amount of $1,373,900 is required for Public Safety in FY 1975, an increase of $86,200 over FY 1974.

Public Safety has the responsibility for law enforcement, fire fighting, and jails in the Trust Territory, registration of vehicles, and licensing of drivers and firearms.

The law enforcement includes primarily patrol, investigation, and the arrest of offenders. Fire fighting includes the handling of brush and structural fires, airport crash and rescue, and inspection of buildings. In district jails, humane incarceration as well as work projects for those serving time must be provided. The Division issues drivers' licenses and inspects and licenses private vehicles.

All the above is supervised and coordinated by Headquarters Public Safety. Headquarters supervision includes assistance with certain district investigations, coordination and planning of training programs, helping with district budgeting and regular inspection of district operations. Headquarters makes certain investigations with its own personnel or personnel borrowed from the districts. Headquarters personnel give special training for policemen and firemen.

An increase in crime rates, together with a growing resident and tourist population and the increasing stock of public and private property, necessitates a more stringent enforcement and application of the law. To meet this challenge, continued emphasis will be placed on training. This will insure that life and property will be protected by well-manned, well-equipped, and well-trained fire and police forces.

The training is being conducted mostly in Saipan. Training will be conducted at all levels. There will be training for recruits, for firemen, for supervisors, for command, and training in specialties such as identification, investigation, traffic, and narcotics.

Staffing:	FY 1974	FY 1975
	2 U.S. Civil Service	1 U.S. Civil Service
	3 U.S. Contract	3 U.S. Contract
	5 U.S. Total	4 U.S. Total
	296 Micronesians	298 Micronesians

The increase of $86,200 will provide $55,900 for normal salary increments, $92,300 for full year funding of new salary schedules authorized by Congress of Micronesia Public Law 5-51; $17,400 for full funding of two positions partially lapsed in FY 1974; $4,100 for increased overtime and $4,200 for two additional Micronesian positions. Partially offsetting these increases are a decrease from eliminating one U.S. position, $21,500; and reductions of $25,300 in equipment, $20,900 in travel, $12,900 in supplies and materials, and $7,100 in all other cost categories.

d. Public Defender:

FY 1974 $276,100, FY 1975 $325,300: Increase $49,200

A total of $325,300 is required for the Public Defender program in FY 1975, an increase of $49,200 over FY 1974.

The Public Defender administers and supervises the operation of the Public Defender systems; provides legal counsel to any person who requires defense in civil or criminal court proceedings; represents persons involved in civil actions where the Government is an adverse party; conducts training programs for Public Defender's Representatives; develops and submits to the Office of the High Commissioner basic operating programs and procedures; and advises and assists Trial Assistants. In each of the six districts, there are one or more Public Defender's Representatives who are responsible for operating the district office of the Public Defender; investigating and recording facts surrounding each case under their cognizance occurring in their district; advising clients regarding their rights in the law; preparing briefs of evidence presented in lower courts; and acting as interpreter or translator. This office is also responsible for preparing petitions for Pardon and Parole as required by law.

The case load has been constantly increasing; from FY 1970 to FY 1972, the number of criminal cases handled increased from 1,681 to 2,000; juvenile cases from 185 to 250; civil cases from 126 to 200. This case load is expected to continue to rise.

Staffing:	FY 1974	FY 1975
	1 U.S. Civil Service	1 U.S. Civil Service
	6 U.S. Contract	6 U.S. Contract
	7 U.S. Total	7 U.S. Total
	24 Micronesians	24 Micronesians

The increase of $49,200 covers the costs of normal salary increments, $8,600; full year funding of new salary schedules and transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, $27,300; full funding of two positions partially lapsed in FY 1974, $9,200; and increases of $1,300 in travel, $1,800 in other services, and $4,000 in supplies and materials. A $3,000 decrease in equipment needs slightly offset the total increase.

e. Local Judiciary:

FY 1974 $260,000, FY 1975 $303,100: Increase $43,100

An amount of $303,100 is needed for the Local Judiciary in FY 1975, an increase of $43,100 over FY 1974.

The Local Judiciary, composed of six District Courts and one hundred twenty-five Community Courts, is administered overall by the High Court Justices and directly by the Micronesian Presiding Judge in each district. All of these courts are staffed entirely by Micronesians, exclusive of the Judges of the Kwajalein Community Court, who serve without extra compensation for their judicial duties at the U.S. Army's Kwajalein Test Site.

Each District Court has original jurisdiction in all civil cases where the amount or value of the property involved does not exceed $1,000, except admiralty and maritime matters and the adjudication of title to land or any interest therein (other than the right to immediate possession), and in all criminal cases where the maximum punishment which may be imposed does not exceed a fine of $2,000 or imprisonment for 5 years, or both.

Each Community Court has original jurisdiction in all civil cases where the amount claimed or value of the property involved does not exceed $100, except admiralty and maritime matters and the adjudication of title to land or any interest therein (other than the right to immediate possession), and in all criminal cases where the maximum punishment which may be imposed does not exceed a fine of $100 or imprisonment for 6 months, or both.

The overall goal of these courts will continue to be the just and prompt hearings of cases within their jurisdictions. In addition, these courts will continue to serve as valuable training grounds for Micronesians to move toward increasingly responsible positions in the judicial and legal fields.

Staffing:	FY 1974	FY 1975
	45 Micronesians	45 Micronesians

The increase of $43,100 will provide for normal salary increments, $12,000; full year funding of new salary schedules authorized by Congress of Micronesia Public Law 5-51, $26,100, and a $600 increase in supplies and materials and an increase of $4,400 for equipment.

6. Administration: FY 1974 $5,221,000, FY 1975 $5,306,500: Increase $85,500. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+122,000	...	...	...	Normal salary increments for 93 U.S. and 528 Micronesian ongoing positions.
(2) +269,200	...	...	...	Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51, costs of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, and of positions partially lapsed in FY 1974.
(3) -305,700	-3 U.S. -3 Micro	...	...	The high priority of funding Capital Improvement projects necessitates reducing operating activities to minimum levels.
$ +85,500	-3 U.S. -3 Micro	$5,306,500	93 U.S. 528 Micro	

Cost Factors Involved in Increases

(1) Normal salary increments for ongoing staff, 93 U.S. at $27,600 and 528 Micronesians at $94,400.

(2) Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51: U.S., $7,000 and Micronesians, $223,400. Cost of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, $24,400. Full year funding of positions partially lapsed in FY 1974, $14,400.

(3) Decrease in staffing of three U.S. and three Micronesian positions results in a savings of $30,800. Other decreases include travel, $23,300; contractual services, $114,600; supplies, $17,000; equipment purchases, $78,400; and all other supporting costs, $41,600.

Need for Increase:

(1) Normal salary increments for 93 U.S. and 528 Micronesian ongoing positions, $122,000: Normal within grade increases must be awarded except in the case of unsatisfactory performance. The Micronesian staff is a young staff and the pattern of an older staff higher in grade and in increments retiring and being replaced by youth in lower grade and in beginning increments will not be evident for some years to come. An increase of $122,000 is requested to meet these increased pay costs.

(2) Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51, costs of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, and of positions partially

lapsed in FY 1974, $269,200: New U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51 became effective September 30, 1973. In FY 1975 the new salary schedules will be in effect the full year. The amount of $230,400 is requested to fully fund the new salary schedules. Congress of Micronesia P.L. 4C-49 authorized transfer allowances for U.S. and certain Micronesian employees upon initial recruitment. Those Micronesians recruited to work in other districts than their home district or recruited from other islands in their home district are eligible. Additionally, these same employees are eligible for transfer allowances if later transferred to new duty stations for the convenience of the Government. These costs are additional to those previously involved in recruitment. An increase of $24,400 is requested to fund these transfer allowances. Those positions for which recruitment was delayed in FY 1974 will require full funding in FY 1975. The amount of $14,400 is requested to fully fund these positions.

(3) The high priority of funding Capital Improvement projects necessitates reducing operating activities to minimum levels, $-305,700: The high priority of needed Capital Improvement projects as expressed repeatedly by the Congress of Micronesia and supported by the Administration makes it necessary to do all possible to hold down rising costs in Operations. A slight decrease in staffing (3 U.S. and 3 Micronesians) in FY 1975 permits a savings of $30,800. Tighter allowances for equipment, contractual services, supplies, travel, and other support costs result in a decrease of $274,900.

Activity	FY 1974 Estimate	FY 1975 Estimate	Increase + Decrease -
6. Administration:			
a. Offices of the District Administrators	$1,133,300	$1,153,400	$+20,100
b. Administrative Services	320,700	318,300	-2,400
c. Office of the Director of Finance	55,700	55,600	-100
d. Financial Management System	159,700 1/	121,700	-38,000
e. Finance and Accounting	747,200	771,800	+24,600
f. Automatic Data Processing	309,100	333,300	+24,200
g. Procurement and Supply	917,100	947,400	+30,300
h. Personnel Department	544,700	600,800	+56,100
i. Leased Housing Fund	330,000	310,000	-20,000
j. Internal Audit	119,800	121,000	+1,200
k. Program and Budget Office	260,000	268,300	+8,300
l. Personnel Benefits	280,000	263,000	-17,000
m. Disaster Control Office	43,700	41,900	-1,800
Total	$5,221,000	$5,306,500	$+85,500

1/ Includes $75,000 of FY 1974 funds currently in a requested reprogramming to fund the Comptroller for Guam as authorized by Public Law 93-111.

Administration is a grouping of general services and management activities, including the Offices of the District Administrators, Administrative Services, Finance (Office of the Director, Financial Management System, Finance and Accounting, Automatic Data Processing, and Procurement and Supply), Personnel (Personnel Department and Leased Housing Fund), Internal Audit, Program and Budget, Disaster Control, and Personnel Benefits.

a. Offices of the District Administrators:

FY 1974 $1,133,300, FY 1975 $1,153,400: Increase $20,100

A total of $1,153,400 is required for the Offices of the District Administrators in FY 1975, an increase of $20,100 over FY 1974.

For administrative purposes, the Trust Territory is divided into six administrative districts: the Marianas, Palau, Yap, Truk, Ponape, and the Marshalls, and seven subdistricts: Rota (Marianas), Ulithi (Yap), Satawan and Namonwito (Truk), Kusaie (Ponape), and Ebeye and Jaluit (Marshalls). Each district is headed by a District Administrator who is appointed by the High Commissioner and who exercises general administrative supervision over all operations, programs, and functions of the Trust Territory Government in his assigned district. He exercises administrative authority in accordance with all applicable laws, regulations, policies and procedures, and is responsible for full and proper compliance with all such directives.

The locale of decision making within the Trust Territory is being increasingly decentralized to the District level to place administrative responsibility at the local level, closer to the actual situation and problem and to secure maximum involvement of the Micronesian people in program planning and management. For example, District Administrators and key members of their staffs now submit and defend their budgets at hearings held by the Congress of Micronesia.

In FY 1975, two U.S. positions will be eliminated from the Office of the District Administrator, Truk: an Accountant and a Secretary. District Treasurer positions (all Micronesians) will be added in the Yap, Ponape, and Marshalls districts. Three Micronesian clerical positions will be eliminated, one in Yap and two in the Marshalls.

Staffing:	FY 1974	FY 1975
	11 U.S. Civil Service	10 U.S. Civil Service
	8 U.S. Contract	7 U.S. Contract
	19 U.S. Total	17 U.S. Total
	104 Micronesians	104 Micronesians

The increase of $20,100 will provide for normal salary increments of $34,000 and for full year funding of new salary schedules and transfer allowance costs authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, $88,500. The increase is almost entirely offset by the elimination of two U.S. positions, $28,100; a $32,500 decrease in equipment; and a $41,800 decrease in other object codes.

b. Administrative Services:

FY 1974 $320,700, FY 1975 $318,300: Decrease $2,400

A total of $318,300 is required for Administrative Services in FY 1975, a decrease of $2,400 from FY 1974.

Included in Administrative Services are the Office of Management Services, which provides mail and messenger services for operating departments, and LNO offices in Guam and Honolulu, which provide assistance to college students and medical referrals and perform other liaison functions. A third LNO office is located in Okinawa. The Okinawa liaison office is the contact with the Defense Department in obtaining military surplus supplies and equipment for the Trust Territory.

Staffing:	FY 1974	FY 1975
	8 U.S. Civil Service	8 U.S. Civil Service
	4 U.S. Contract	4 U.S. Contract
	12 U.S. Total	12 U.S. Total
	8 Micronesians	8 Micronesians

The decrease of $2,400 results from the $9,900 reduction in equipment purchases being partially offset by the increases of $5,100 for normal salary increments and $2,400 for full year funding of new salary schedules and transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49.

c. Office of the Director of Finance:

FY 1974 $55,700, FY 1975 $55,600: Decrease $100

A total of $55,600 is required for the Office of the Director of Finance in FY 1975, a decrease of $100 from FY 1974.

The Office of the Director of Finance gives general supervision to and is responsible for the operations of the Divisions of Revenue, Finance and Accounting, Automatic Data Processing, and Procurement and Supply. The Financial Management System Implementation Team works under this Office's direct supervision. This office is also responsible for coordination with the Micronesian Claims Commission and the Government of Japan with respect to the Micronesian Claims Act of 1971. The U.S. staff consists of the Director (who reports directly to the High Commissioner) and his secretary.

Staffing:	FY 1974	FY 1975
	2 U.S. Civil Service	2 U.S. Civil Service

The decrease of $100 results from an increase for normal salary increments, $1,500; and transfer allowance costs as authorized by Congress of Micronesia Public Law 4C-49, $400; and a $2,000 decrease in travel.

d. Financial Management System:

FY 1974 $159,700, FY 1975 $121,700: Decrease $38,000

A total of $121,700 is required for the Financial Management System Implementation in FY 1975, a decrease of $38,000 from FY 1974.

The present Trust Territory Financial Management System was designed many years ago to accommodate a total program of less than $5 million. As the Trust Territory program grew both in dollar amounts and in complexity, it was readily apparent that a new System was needed. In FY 1970, a nationally known CPA firm was awarded a contract to design a new system. The design of the new System (and the new Financial Management System Manual) was completed in late FY 1971.

The implementation plan focuses on training, cleanup of existing accounting records, data processing systems analysis, programming, testing, and conversion and updating of the completed System to accommodate the recommendations of the Office of Survey and Review, Department of the Interior.

The team will conduct training sessions throughout the Trust Territory, correct and prepare existing accounting records for conversion to automated processing and assist the districts with initial preparation of input documents.

In FY 1975, one additional Micronesian systems accountant will be required.

Staffing:	FY 1974	FY 1975
	4 U.S. Contract	4 U.S. Contract
	3 Micronesians	4 Micronesians

The decrease of $38,000 results from decreases of $63,200 in other services and $3,400 in equipment purchases more than offsetting a $3,800 increase for normal salary increments; $9,600 for full year funding of new salary schedules plus transfer allowance costs authorized by Congress of Micronesia Public Laws 5-51 and 4C-49; $5,900 for the addition of one Micronesian position; and $9,300 for full year funding of positions partially lapsed in FY 1974.

Health Birth and Death Records, Micronesian Social Security System, Accounts Payable and Journal Voucher Accounting, Capital Item Inventory, Micronesian Income Tax Accounting, Congress of Micronesia Status Table, Micronesian War Claims, and current Staffing Reports. It is anticipated that this Division will implement portions of the Financial Management System during FY 1974 and continue during FY 1975.

One new position, Micronesian Programmer Trainee, is required in FY 1975 to support this program.

Staffing:	FY 1974	FY 1975
	3 U.S. Civil Service	3 U.S. Civil Service
	4 U.S. Contract	4 U.S. Contract
	7 U.S. Total	7 U.S. Total
	19 Micronesians	20 Micronesians

The increase of $24,200 consists of $9,400 for normal salary increments, $9,600 for full year funding of new salary schedules and transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, and $3,100 for one additional Micronesian position. Slight increases in supplies, $2,600, and equipment, $500, are partially offset by a $1,000 decrease in travel.

g. Procurement and Supply:

FY 1974 $917,100, FY 1975 $947,400: Increase $30,300

A total of $947,400 is required for Procurement and Supply in FY 1975, an increase of $30,300 over FY 1974.

Under the general supervision of the Director of Finance, the Procurement and Supply Division includes the office of the Division Chief at headquarters and offices of the District Supply Officers in each of the districts. Although the District Supply Officers are under the direct supervision of the District Administrators, they receive technical guidance and assistance from the Chief of Procurement and Supply Division.

This Division has responsibility for planning, developing and directing the procurement and supply program of the Trust Territory Government, plus the promulgation of policies and procedures as established by the High Commissioner's Office; development and analysis of supply systems, procedures, methods, performance, production standards and reports; management of the Trust Territory Supply Stock

Fund; the procurement, requisitioning, receiving, issuing, warehousing, inventory control, supply management, packing and crating, stock surveillance, and management control of government quarters furniture; accurate accountability controls and records for all consumable supplies and minor and major capital equipment; administration of the property disposal and sale program; and administering the USDA donated food program. This Division is also responsible for the maintenance and operation of the Central Office Machine Repair Shop and for the coordination of office machine repairs outside the Territory as required.

At headquarters the Division is organized into four operational branches: Procurement, Stock Control, Depot Operations, and Repair Parts. The Procurement Branch is responsible for the procurement of supplies, materials, and equipment. The Stock Control Branch is responsible for the establishment and maintenance of the property accountability, stock control, inventory control and supply management programs. The Depot Operations Branch is responsible for warehousing and storage activities within the Saipan depot. The Repair Parts Branch is responsible for the daily operations involved with the acquisition, receipt, issue, identification and storage of all repair parts, including components and assemblies required in support of all vehicular, automotive, marine, and other types of heavy construction, power plants, road building, materials handling, and all equipment requiring repair part support.

Staffing:	FY 1974	FY 1975
	15 U.S. Civil Service	15 U.S. Civil Service
	3 U.S. Contract	2 U.S. Contract
	18 U.S. Total	17 U.S. Total
	197 Micronesians	197 Micronesians

The increase of $30,300 provides for normal salary increments, $27,900; full year funding of new salary schedules plus transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, $49,000. The elimination of one U.S. position, $12,900, and reductions of $13,700 in equipment, $7,600 in supplies, $2,600 in travel, and $9,800 in other budgeted cost categories partially offset the increases.

h. Personnel Department:

FY 1974 $544,700, FY 1975 $600,800: Increase $56,100

A total of $600,800 is required for the Personnel Department in FY 1975, an increase of $56,100 over FY 1974.

The Personnel Department under the general supervision of the Director of Personnel includes the Director's Office, the Division of Personnel Training, and the Leased Housing Fund located in headquarters in Saipan and the offices of the District Personnel Administrators in each of the districts. The District Personnel Administrators are under the direct supervision of the District Administrators but they receive technical guidance and assistance from the Director of Personnel. This Department is responsible for the administration of a complete personnel program for all Trust Territory Government employees; it administers the Trust Territory Public Service Act for Micronesians and non-Micronesian contract employees; and develops and administers a system of employees' benefits, including leave, group life insurance, and a retirement plan. It administers the recruitment program for contract and other expatriate employees to provide specialized skills not locally available; administers all applicable provisions of the Civil Service and contract employment system.

In FY 1975, each District Personnel Office will have on its staff a District Personnel Officer, a District Classification Specialist, one or two Personnel Assistants, one or two each of clerks and typists. The Management Intern selected for Palau will begin a one-year training program at headquarters in FY 1975. During FY 1975, the district personnel training functions will be coordinated by two Training Specialists detailed to the districts to give leadership and assistance to the District Personnel staff.

Under the supervision of the Director of Personnel, the Chief of the Training Division is responsible for planning, administering, developing, coordinating and implementing continuous training programs geared toward the development and advancement of our public service work force. More emphasis, therefore, will be in expanding areas of clerical skills, first-line supervisory skills and trade skills. The expansion of trades skills through training of Micronesians is necessary to reduce the skyrocketing of outside labor in this area.

Training will be provided in beginning reading and oral English developed particularly for the trades areas. Communication skills will be increased by instruction in higher level reading comprehension and written English in courses tailored to meet the need of specific areas, individuals, job requirements and employee advancement. Implementation of training programs in this area will be closely coordinated with the trades skills specialists in the district level.

Management training will continue along the prevailing pattern under the Nebraska-Trust Territory Extension Program, the Oklahoma Masters Degree Program and special outside seminars such as the Dale Carnegie and Associates Management Seminar and other courses developed by the Division.

Staffing:	FY 1974	FY 1975
	5 U.S. Civil Service	5 U.S..Civil Service
	5 U.S. Contract	5 U.S. Contract
	10 U.S. Total	10 U.S. Total
	58 Micronesians	57 Micronesians

The increase of $56,100 is due almost entirely to funding normal salary increments, $19,700, and new salary schedules and transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, $38,700. Increases of $900 due to adding one new Micronesian position and dropping two others, of $3,000 in travel, $300 in printing, and $1,100 in supplies are offset by a $1,100 decrease in other services, and $6,500 reduction for equipment purchases.

i. Leased Housing Fund:

FY 1974 $330,000, FY 1975 $310,000: Decrease $20,000

A total of $310,000 is required for the Leased Housing Fund in FY 1975, a decrease of $20,000 from FY 1974.

The Leased Housing Fund provides funds for leasing privately owned houses, and for purchase of furniture and appliances for leased as well as Government owned houses.

At the request of the Congress of Micronesia, the Trust Territory has discontinued construction of staff housing except in conjunction with major new facilities. As a result, the Government has a policy of leasing private houses whenever they can be found. Private companies have indicated an interest in constructing houses

for lease if the Government will guarantee to lease them for an extended period. The mechanism is that the Government will enter into long term commitments to lease privately owned houses, existing or to be built, with the proviso that annual payment will be subject to the availability of appropriations in future years.

The Trust Territory Government currently owns 587 units of staff housing and leases an additional 75 units. Housing is furnished to expatriate employees and to Micronesians who are reassigned outside their home districts. Normal growth of Trust Territory programs together with sharply increased inter-district transfer of Micronesians who are assuming increased responsibilities are generating a heavy demand for additional houses.

The decrease is due to reduced purchases of replacement furniture and fixtures for both leased and Government owned houses.

j. Internal Audit:

FY 1974 $119,800, FY 1975 $121,000: Increase $1,200

A total of $121,000 is required for Internal Audit in FY 1975, an increase of $1,200 over FY 1974.

The Internal Auditor reports directly to the Office of the High Commissioner. While coordinating its programs with the Comptroller for Guam, the Internal Audit staff will concentrate its efforts on audits at the district and municipal level. It will conduct audits of District Legislatures, municipalities, Credit Unions, and trouble spots as determined by the High Commissioner. It will also perform audits of government contracts and commercial firms as provided for in agreements or by-laws.

Staffing:	FY 1974	FY 1975
	2 U.S. Civil Service	2 U.S. Civil Service
	6 Micronesians	6 Micronesians

The increase of $1,200 is required for normal salary increments, $1,900; full year funding of new salary schedules authorized by Congress of Micronesia Public Law 5-51, $4,100; and for upgrading three ongoing positions, $2,800. Reduced requirements for travel, $4,300; supplies, $1,800; and other costs, $1,500; partially offset the increases.

k. Program and Budget Office:

FY 1974 $260,000, FY 1975 $268,300: Increase $8,300

A total of $268,300 is required for the Program and Budget Office in FY 1975, an increase of $8,300 over FY 1974.

Under the general supervision of the High Commissioner, the Program and Budget Office is responsible for long-range program planning, programming resources required in meeting goals established in the planning process, and formulating and executing the annual budget request for funds to implement approved programs. These activities form an integral part of the Planning-Programming-Budgeting System. The Office prepares annually and updates as required the Trust Territory multi-year Program and Financial Plan including all necessary supporting analyses and documentation. Also prepared are budget submissions at various review levels

including the Congress of Micronesia, Department of Interior, Office of Management and Budget, and the U.S. Congress. Responsibility for proper and effective execution of the budget involves the apportionment and allotment of funds systems together with financial analysis and reporting.

The Program and Budget activity as herein budgeted is for Headquarters only. The funds and staff for the Program and Budget activity in the six districts are budgeted under the activity, Office of the District Administrator. The District offices are under the direct supervision of the District Administrators with technical guidance and assistance from Headquarters.

Staffing:	FY 1974	FY 1975
	4 U.S. Civil Service	4 U.S. Civil Service
	2 U.S. Contract	3 U.S. Contract
	6 U.S. Total	7 U.S. Total
	7 Micronesians	7 Micronesians

The increase of $8,300 includes $4,400 for normal salary increments and $8,300 for full year funding of new salary schedules and transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49. An additional increase of $13,300 is required for one new U.S. position. These increases are partially offset by the discontinuation of a reimbursable support agreement, $15,600, and reductions in travel, $1,400, and equipment, $700.

1. Personnel Benefits:

FY 1974 $280,000, FY 1975 $263,000: Decrease $17,000

A total of $263,000 is required for Personnel Benefits in FY 1975, a decrease of $17,000 from FY 1974.

Personnel Benefits include funds for retirement and payments to Micronesians who retired under Social Security with more than five years service (the Trust Territory Government is committed to pay retirement costs for service prior to the establishment of the Trust Territory Social Security program), death benefits for Micronesian employees, workmen's compensation insurance, and education allowances for eligible dependents of U.S. employees.

m. Disaster Control Office:

FY 1974 $43,700, FY 1975 $41,900: Decrease $1,800

A total of $41,900 is required for the Disaster Control Office in FY 1975, a decrease of $1,800 from FY 1974.

Under the general supervision of the Special Consultant to the High Commissioner, the Disaster Control Office administers a program having two specified responsibilities and functions. First, that of carrying out a program of maintenance, improving, and updating the Disaster and Recovery Plan of the Trust Territory Government; and working with the districts and local organizations in the training and education of their staffs and the general public. Second, coordination of the entire plan of operations to meet disasters or potential disasters during the phases of Emergency Preparedness, Disaster Control and Recovery.

Included in the budget for the Office is provision for a grant of up to $25,000 in matching funds from the Federal Disaster Assistance Agency.

Staffing:	FY 1974	FY 1975
	3 U.S. Contract	3 U.S. Contract
	1 Micronesian	1 Micronesian

The decrease of $1,800 includes $1,900 reduced travel, $1,600 reduced requirement for equipment, reductions of $1,200 for supplies and materials, and $2,000 for other services. The decreases are partially offset by normal salary increases of $1,600, transfer allowances authorized by Congress of Micronesia Public Law 4C-49, $800, and for full year funding of a position partially lapsed in FY 1974, $2,500.

7. Transportation and Communications: FY 1974 $3,222,500, FY 1975 $3,324,900: Increase $102,400. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$ +41,700	...	...	...	Normal salary increments for 31 U.S. and 168 Micronesian ongoing positions.
(2)	+92,000	...	...	...	Full year funding of new U.S. Contract and Micronesian schedules authorized by Congress of Micronesia P.L. 5-51, costs of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, and of positions partially lapsed in FY 1974.
(3)	+37,200	...	...	...	Minor increase in Operations and Maintenance of ships.
(4)	-68,500	-2 U.S. -1 Micro	...	...	Slight reductions of staff in Communications Division more than offsetting a slight increase in support costs of all activities.
	$+102,400	-2 U.S. -1 Micro	$3,324,900	31 U.S. 168 Micro	

Cost Factors Involved in Increases

(1) Normal salary increments for ongoing positions, 31 U.S. at $9,900 and 168 Micronesians at $31,800.

(2) Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51: U.S. $7,900 and Micronesians, $54,800. Cost of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, $11,200. Full year funding of positions partially lapsed in FY 1974, $18,100.

(3) Increase of $37,200 for the Sea Transportation program to allow for operations and maintenance related cost increases.

(4) Elimination of two U.S. and one Micronesian positions resulting in a savings of $75,700. Increases for equipment purchases, $20,000, and contractual services, $10,400, mostly offset by decreases in rents, $19,500, and all other supporting costs, $3,700.

Need for Increase:

(1) Normal salary increments for 31 U.S. and 168 Micronesian ongoing positions, $41,700: Normal within grade increases must be awarded except in the case of unsatisfactory performance. The Micronesian staff is a young staff and the pattern of an older staff higher in grade and increments being replaced by youth in lower grade and beginning increments will not be evident for some years to come. An increase of $41,700 is requested to meet these increased pay costs.

(2) Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51, costs of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, and of positions partially lapsed in FY 1974, $92,000: New U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51 became effective September 30, 1973. In FY 1975 the new salary schedules will be in effect the full year. The amount of $62,700 is requested to fully fund the new salary schedules. Congress of Micronesia P.L. 4C-49 authorized transfer allowances for U.S. and certain Micronesian employees upon initial recruitment and upon transfers. These costs are additional to those previously involved in Recruitment. An increase of $11,200 is requested to fund these transfer allowances. Those positions for which recruitment was delayed in FY 1974 will require full funding in FY 1975. The amount of $18,100 is requested to fully fund these positions.

(3) Minor increase in Operation and Maintenance of ships, $37,200: To insure the continued and successful operation of the Sea Transportation program in the face of rising costs of pay for crews, of drydocking, replacement and parts and ships' supplies, an increase of $37,200 is requested in FY 1975.

(4) Slight reduction of staff in Communications more than offsetting a slight increase in support costs of all activities, $-68,500: Three high level U.S. civil service positions and one Micronesian position will be dropped in FY 1975 and only one U.S. middle range contract position added with net savings of $75,700. This decrease more than offsets a small increase in other support costs for the Office of the Director, the Transportation Office, as well as the Communications Division of $7,200.

Activity	FY 1974 Estimate	FY 1975 Estimate	Increase + Decrease -
7. Transportation and Communications:			
a. Office of the Director	$ 63,200	$ 68,800	$ +5,600
b. Transportation Office	410,100	449,400	+39,300
c. Sea Transportation	1,498,000	1,535,200	+37,200
d. Communications	1,251,200	1,271,500	+20,300
Total	$3,222,500	$3,324,900	$+102,400

The geographical distribution and the isolation of the islands of Micronesia make transportation and communications a vital support service to accomplishing any of the political, social, educational and economic objectives of the Trust Territory.

a. Office of the Director:

FY 1974 $63,200, FY 1975 $68,800: Increase $5,600

A total of $68,800 is required for the Office of the Director in FY 1975, an increase of $5,600 over FY 1974.

The Office of the Director of Transportation and Communications is responsible for the overall administration and coordination of the total transportation and communications system in the Trust Territory.

The Director of Transportation and Communications is directly responsible to the High Commissioner for the planning, development, administration of the systems, and for furnishing expert advice concerning transportation and communications activities Trust Territory-wide.

Staffing:	FY 1974	FY 1975
	2 U.S. Contract	2 U.S. Contract
	1 Micronesian	1 Micronesian

The increase of $5,600 provides for normal salary increments of $2,500; for full funding of new salary schedules and transfer allowances authorized by Congress of Micronesia P.L. 5-51 and 4C-49, $1,600; and $3,000 for increased equipment requirements. A small offset results from the $1,500 reduction in other services.

b. Transportation Office:

FY 1974 $410,100, FY 1975 $449,400: Increase $39,300

A total of $449,400 is required for the Transportation Office in FY 1975, an increase of $39,300 over FY 1974.

Under the general supervision of the Director of Transportation and Communications, the Chief of the Transportation Division is responsible for: the formulation of programs relating to air, land and sea transportation activities; the planning, programming and budgeting of all road systems, warehouses, harbors,

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airports and ship capital improvements; the inspection and provision of navigational aids and markers; the provision of marine inspection and licensing procedures; and the development of tariff schedules, routes and rates.

The Transportation Division compiles and maintains statistical data on transportation activities. In addition, this office is administratively responsible for the operation of the interisland ships as well as for providing general supervision of the operations of other Government-owned interisland ships that are currently operated by private shipping firms.

The published Transportation Division objectives include: lowest cost transport service, regular and reliable transport-mode schedules, maximum Micronesian employment and maximum contribution to Trust Territory economic development. These objectives will be most effectively attained through a program which analyzes all transport alternatives, selects equipment and facilities to operate the most cost effective service, negotiates appropriate contracts with suppliers, common carriers and construction contractors, supervises the performance of contracts, trains Micronesians for shore-side, sea-going and aviation-related positions, documents the periodic progress toward specific goals and utilizes the advice and consulting expertise that are available through United States Government agencies such as the Federal Maritime Commission, the U.S. Maritime Administration, the Bureau of Public Roads, the Army Corps of Engineers, Naval Facilities Engineering Command and the Federal Aviation Administration.

The educational and training programs (planned to supply skilled officers and men for the ships and to provide and train capable management personnel for related ship activities) will be continued in FY 1975 in close cooperation with the Education Department, several U.S. Government agencies and numerous maritime training agencies. It is anticipated that 20 employees within the transportation system will participate in training programs in FY 1975. The completion of training of some Micronesians will result in their gradual assumption of administrative duties.

The program to acquire and stockpile interchangeable repair parts at a selected in-territory ship repair center for use in the quick repair of disabled machinery on the present and new vessels will be continued during FY 1975. This program is expected to decrease the down-time of our aged vessels and provide for maximum utilization, resulting in more regular and efficient service to the outer islands.

The program to develop effective rules, regulations and policies for all Trust Territory seaports and airports, implemented in FY 1974, will be carried forward in FY 1975, with emphasis on standardization wherever practical. In addition, the program to establish procedures for the collection of all harbor charges and airport landing fees is expected to be refined into an efficient and workable system. It is planned that a significant portion of the revenues derived from these activities will be used to maintain and improve the ports and airfields of the Trust Territory. Careful coordination with appropriate federal agencies is expected to ensure that the airport improvement program is moving well into the construction phase at Saipan, Yap and Palau.

Certification and licensing procedures for Trust Territory maritime personnel, to be developed and introduced in FY 1974, will be continued in FY 1975. Emphasis will be given in FY 1975 to refinement of licensing examinations in accordance with established international qualifications.

Staffing:	FY 1974	FY 1975
	5 U.S. Civil Service	5 U.S. Civil Service
	5 U.S. Contract	5 U.S. Contract
	10 U.S. Total	10 U.S. Total
	28 Micronesians	28 Micronesians

The increase of $39,300 consists of $11,700 for normal salary increments; $20,400 for full year funding of new salary schedules and transfer allowances authorized by Congress of Micronesia P.L. 5-51 and 4C-49; $3,800 for full year funding of one position partially lapsed in FY 1974; and $3,400 for minor increases in other cost categories.

c. Sea Transportation:

FY 1974 $1,498,000, FY 1975 $1,535,200: Increase $37,200

The amount of $1,535,200 is requested for Sea Transportation in FY 1975, an increase of $37,200 over FY 1974.

Sea Transportation provides an extremely vital component for the development of an evenly balanced economy in the Trust Territory. Only by the use of regularly scheduled ships can each district grow, prosper and maintain properly balanced population centers. The development of a viable economy in the outer islands is necessary to prevent an increase in the present trend of migration to the district centers. The Trust Territory interisland fleet delivers needed supplies, medical and educational personnel and government equipment, and picks up exports (fish, agricultural products, copra, etc.) when the outer islands are able to develop these products as a result of the certainty of a regular ship's service. It is expected that forty-five to sixty day service will be maintained to most inhabited islands in the Trust Territory at this particular funding level.

Sea Transportation service within the Trust Territory is complemented by transpacific shipping which is operated by a contractor, Transpacific Lines, Inc., (ex-MILI) that is working under a 10-year contract initiated on September 1, 1968. The contract calls for scheduled direct linkage with the United States West Coast ports as well as direct calls at Japanese and other Far Eastern ports. The contract also requires the progressive development of a Micronesian-owned, operated and staffed company by the end of the 10-year period.

Interisland shipping is planned to be accomplished in FY 1975 through a government-owned fleet of eight (8) ships. One of the ships will be the M/S Micronesia Princess, expected to be delivered to the Trust Territory by June 30, 1974. Two (2) of these ships will be operated regularly within specific districts through charter agents who receive subsidies to compensate for differences in operating cost and commercial revenue. Five (5) and possibly six (6) ships will be operated at various locations throughout the Territory for purposes of providing minimum logistic support service in each district. These ships will be operated by the Transportation Division through agents or District Transportation Offices.

The increase of $37,200 will provide for normal wage increments for the ships' crews and cover increased costs of operation and maintenance of our twenty to thirty-year old ships.

d. Communications:

FY 1974 $1,251,200, FY 1975 $1,271,500: Increase $20,300

A total of $1,271,500 is required for Communications in FY 1975, an increase of $20,300 over FY 1974.

The lifeline of administration is communications. The geographical isolation of the Trust Territory and its widely scattered islands requires a communications system that serves the needs of all: private, commercial and government.

Under the general supervision of the Director of Transportation and Communications, the Chief of the Communications Division is responsible for the planning, engineering, operations and maintenance of the complete communications service in the Trust Territory. In order to adequately meet these needs, major communications facilities are located in each of the District Centers: Majuro, Marshall Islands; Ponape, Eastern Caroline Islands; Truk, Eastern Caroline Islands; Yap, Western Caroline Islands; Koror, Palau, Western Caroline Islands; and a major international communications complex on Saipan which links the Trust Territory to all parts of the world.

These facilities form a closely integrated network that provides quality voice and data service into and through the Major Relay Control Center on Saipan that interfaces with commercial and other governmental systems worldwide. In addition, each facility is capable of communicating with aircraft, shipping and outer islands of the Trust Territory. All maintain a continuous radio guard on a number of frequencies, including international distress. Non-Directional Radio Beacons are provided for navigational guidance to all ships and aircraft transiting the area. The Trust Territory is a part of the National Communications System (NCS).

By 1975, all facilities will be fully operational with a reliable system that interfaces with commercial and other governmental systems. Telephone and telegraphic services will assure all users instant communications within the Trust Territory and to points beyond.

An important responsibility of the Communications Division is the secondary system for providing communications between outer islands and District Centers. Complete radio stations with full backup systems are installed on all major islands and remote municipalities. These small radio stations (SSB and VHF) serve as the only immediate link to the outside world for the remote areas where lengthy communication outages can endanger the lives of the people as medical emergencies, epidemics, natural disasters, food and water shortages can and do occur. The outer islands communications network involves over 250 stations serving approximately forty thousand people.

The primary goal of the Communications Division is to provide a quality, dependable, modern communications service that is readily available to all people in Micronesia and to provide radio navigational aids that meet all FAA standards. Increased aviation requirements will see introduction of more sophisticated electronic, navigational and landing aids for airports. Increasing demands for additional services by both governmental and commercial interests will result in a continuing expansion and upgrading of present systems.

Staffing:	FY 1974	FY 1975
	14 U.S. Civil Service	11 U.S. Civil Service
	7 U.S. Contract	8 U.S. Contract
	21 U.S. Total	19 U.S. Total
	140 Micronesians	139 Micronesians

The increase of $20,300 includes $27,500 for normal salary increments; $51,900 for full year funding of new salary schedules and transfer allowances authorized by Congress of Micronesia P.L. 5-51 and 4C-49; $14,300 for full funding of positions partially lapsed in FY 1974; and for increased needs for equipment, $16,600; travel, $1,800; other services, $8,000; and freight, $1,000. Much of the total increase is offset by savings from elimination of two U.S. and one Micronesian position, $75,700, and by cuts of $20,000 in rents and communications and $5,100 in other costs.

8. Public Works: FY 1974 $7,913,400, FY 1975 $8,089,300: Increase $175,900. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+220,900	...	...	...	Normal salary increments for 71 U.S. and 1,359 Micronesian ongoing positions
(2) +431,400	...	...	...	Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51, costs of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, and of positions partially lapsed in FY 1974.
(3) -476,400	-6 U.S. -22 Micro	...	...	The high priority of Capital Improvement projects makes it necessary to operate and maintain existing and new facilities with less staff and tighter allowances for supplies, equipment, and other support costs.
$+175,900	-6 U.S. -22 Micro	$8,089,300	71 U.S. 1,359 Micro	

Cost Factors Involved in Increases

(1) Normal salary increments for ongoing positions, 71 U.S. at $33,100 and 1,359 Micronesians at $187,800.

(2) Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51: U.S., $39,500 and Micronesians, $350,400. Cost of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, $24,000. Full year funding of positions partially lapsed in FY 1974, $17,500.

(3) Savings resulting from elimination of positions: 6 U.S., $85,800, 22 Micronesians, $44,800. Utility and other collections increases producing a savings of $139,000. Further decreases for travel ($18,200), supplies ($113,400), equipment purchases ($89,700), and other supporting costs ($22,800), are slightly offset by an increase of $37,300 for contractual services.

Need for Increase:

(1) Normal salary increments for 71 U.S. and 1,359 Micronesian ongoing positions, $220,900: Normal within grade increases must be awarded except in the case of unsatisfactory performance. The Micronesian staff is a young staff and the pattern of an older staff higher in grade and in increments retiring and being replaced by youth lower in grade and beginning increments will not be evident for some years to come. An increase of $220,900 is requested to meet these increased pay costs.

(2) Full year funding of new U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51, costs of transfer allowances authorized by Congress of Micronesia P.L. 4C-49, and of positions partially lapsed in FY 1974, $431,400: New U.S. Contract and Micronesian salary schedules authorized by Congress of Micronesia P.L. 5-51 became effective September 30, 1973. In FY 1975 the new salary schedules will be in effect the full year. The amount of $389,900 is requested to fully fund the new salary schedules. Congress of Micronesia P.L. 4C-49 authorized transfer allowances for U.S. and certain Micronesian employees upon initial recruitment. Those Micronesians recruited to work in other districts than their home district or recruited from other islands in their home district are eligible. Additionally, these same employees are eligible for transfer allowances if later transferred to new duty stations for the convenience of the Government. These costs are additional to those previously involved in Recruitment. An increase of $24,000 is requested to fund these transfer allowances. Those few positions for which recruitment was delayed in FY 1974, will require full funding in FY 1975. The amount of $17,500 is requested to fully fund these positions.

(3) The high priority of Capital Improvement projects makes it necessary to operate and maintain existing and new facilities with less staff and tighter allowances for supplies, equipment, and other support costs, $-476,400: The high priority of needed Capital Improvement projects as expressed repeatedly by the Congress of Micronesia and supported by the Administration makes it necessary to do all possible to hold down rising costs in Operations. A total of 28 positions will be dropped in FY 1975: 6 U.S. and 22 Micronesians at savings of $130,600. Utility and other collections are anticipated to increase in FY 1975, producing a savings of $139,000. Tighter allowances for supplies, equipment, and other support costs permit a decrease in the budget request of $206,800.

Activity	FY 1974 Estimate	FY 1975 Estimate	Increase + Decrease -
8. Public Works:			
a. Engineering and Administration	$ 611,100	$ 633,100	$ +22,000
b. Operations and Maintenance	4,486,200	4,378,200	-108,000
c. Utilities	2,816,100	3,078,000	+261,900
Total	$7,913,400	$8,089,300	$+175,900

The Department of Public Works is responsible for the planning, implementation and administration of the Capital Improvement Program of the Trust Territory Government and the operation and maintenance of all government-owned facilities in the six districts.

The administration of the above programs is carried out by personnel specialized in all engineering disciplines, i.e., architectural, structural, mechanical, civil, electrical and sanitary, with required draftsmen, surveyors, technicians, estimators and specification writers, etc.

a. Engineering and Administration:

FY 1974 $611,100, FY 1975 $633,100: Increase $22,000

A total of $633,100 is required to support the Public Works Engineering and Administration in FY 1975, an increase of $22,000 over FY 1974.

Headquarters Public Works Engineering and Administration is made up of two sections which are under the general supervision of the Director of Public Works: the Office of the Director of Public Works (Administration) and the Office of the Chief of Operations and Maintenance.

The Director's Office is responsible for the general overall administration of the Department of Public Works, Trust Territory-wide, including direct administration of the Headquarters Department, budget and fiscal management, planning, programming, and personnel administration. It also assists in the negotiation and awarding of local contracts as well as outside contracts, provides support with respect to general advice, etc.

The Chief of Operations and Maintenance is responsible in each of the areas of operations and maintenance, such as facilities maintenance, utilities, refrigeration and air conditioning, ports, roads, airports, and transportation. His office furnishes technical advice and support to the districts.

There is no change in staff in FY 1975.

Staffing:	FY 1974	FY 1975
	6 U.S. Civil Service	6 U.S. Civil Service
	16 U.S. Contract	16 U.S. Contract
	22 U.S. Total	22 U.S. Total
	18 Micronesians	18 Micronesians

The increase of $22,000 will provide for normal salary increments of $15,100; full year funding of new salary schedules and costs of transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, $34,300; and for full year funding of positions partially lapsed in FY 1974, $11,500. These increases are partially offset by reduced requirements of $1,400 for travel, $13,500 for supplies, $9,000 for equipment, $10,000 for contractual services, and $5,000 in other support costs.

b. Operations and Maintenance:

FY 1974 $4,486,200, FY 1975 $4,378,200: Decrease $108,000

A total of $4,378,200 is required for Public Works Operations and Maintenance in FY 1975, a decrease of $108,000 from FY 1974.

This activity is responsible for the maintenance of government-owned buildings and facilities within the six districts of the Trust Territory. These facilities include schools, quarters, hospitals, office buildings, warehouses and garages, roads, streets, airfields, docks and ports, refrigeration plants and air conditioning systems, automotive and heavy equipment, small boats and landing crafts. Services to the general public and private contractors are provided on a reimbursable basis when such services are not available through private sources.

The Trust Territory will acquire new additions to its physical plant in FY 1974 and FY 1975, as completed Capital Improvement projects come on the line. These new facilities would normally require additional personnel, supplies, materials and equipment to insure proper care and continuing uninterrupted service. We are hopeful that previous upgrading of local skills and crafts will now allow the Micronesians to assume more responsibility in operating and maintaining the facilities and equipment, thereby reflecting a savings of manpower and funds in FY 1975.

The upgrading of the skills and crafts of the Micronesians will continue in FY 1975. Emphasis will be placed on "in-house" training. However, a limited number of Micronesians will go to various schools in the United States for advanced training. The "in-house" training is being accomplished by the Central Repair Facility, a branch of the Operations and Maintenance Division. Air conditioning, refrigeration and appliance service and repair are being offered at the present and it is hopeful that courses in telephone and power distribution and generation will be available in FY 1975.

In FY 1975, 4 U.S. and 23 Micronesians will be dropped.

Staffing:	FY 1974	FY 1975
	11 U.S. Civil Service	10 U.S. Civil Service
	27 U.S. Contract	24 U.S. Contract
	38 U.S. Total	34 U.S. Total
	937 Micronesians	914 Micronesians

The decrease of $108,000 is the net result of increased costs of $143,800 for normal salary increments, $256,400 for full funding of new salary schedules and transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, $4,100 for full year funding of one position partially lapsed in FY 1974, and the elimination of four U.S. and twenty-three Micronesian positions, $110,600, and reduced requirements of $258,400 for supplies, $14,300 for travel, $87,400 for equipment, and $41,600 for other support costs.

c. Utilities:

FY 1974 $2,816,100, FY 1975 $3,078,000: Increase $261,900

A total of $3,078,000 is required for Public Works Utilities in FY 1975, an increase of $261,900 over FY 1974.

Under this activity, the Trust Territory Government provides utility services not only for government buildings and facilities but also for commercial establishments, churches, parochial schools and private residences within the reach of the utility installation. The extent of these services varies in the different districts and, with the exception of Saipan, is limited to an area of two or three miles of the district or sub-district center. Current CIP funding provides for extended service from the district center and the development of water and power utilities in some of the outer islands. Telephone and sewerage facilities, however, are provided only in the district centers.

The following table lists the utility systems that will be in operation in the six districts during FY 1975:

System Description	Size or No.
Power Generation - Capacity	32,500 KW
- Produced	97,000,000 KWH
Power Distribution	220 Miles
Wells	30 Each
Pumping Stations	30 Each
Storm Sewers	35 Miles
Water Lines	350 Miles
Sanitary Sewers	45 Miles
Water Treatment Plants	6 Locations
Sewage Treatment Plants	5 Locations
Telephone Systems	6 Locations
Telephone Lines	70 Miles

In FY 1975, one Micronesian position will be added and 2 U.S. positions abolished.

Staffing:	FY 1974	FY 1975
	3 U.S. Civil Service	3 U.S. Civil Service
	14 U.S. Contract	12 U.S. Contract
	17 U.S. Total	15 U.S. Total
	426 Micronesians	427 Micronesians

The increase of $261,900 covers increases of $63,900 for normal salary increments, $123,200 for full year funding of new salary schedules and costs of transfer allowances authorized by Congress of Micronesia Public Laws 5-51 and 4C-49, and $2,100 for one new Micronesian position. Increased costs of $158,500 for supplies and materials, $51,200 for other services and $2,100 for other costs categories are offset by the elimination of two U.S. positions, $22,100, and by an anticipated increase of $117,000 in utility collections. The increased revenues are applied against costs and permit a corresponding decrease in the appropriation requirement.

B. CAPITAL IMPROVEMENT PROGRAM

	Type of Improvement	FY 1974 Current Program	FY 1975 Estimate	Increase + Decrease -
1.	Public Affairs Facilities	$ 73,203	$ - 0 -	$ -73,203
2.	Legal Affairs Facilities	27,837	- 0 -	-27,837
3.	Judiciary Facilities	1,012	- 0 -	-1,012
4.	Education Facilities	4,810,981	1,467,000	-3,343,981
5.	Public Health Facilities	5,033,561	2,895,000	-2,138,561
6.	Transportation and Communications Facilities	8,446,051	1,139,000	-7,307,051
7.	Resources and Development Facilities	390,865	80,000	-310,865
8.	Community Development Facilities	691,966	1,392,000	+700,034
9.	Water, Sewerage and Power Facilities	1,778,133	1,794,000	+15,867
10.	Maintenance and Rehabilitation Facilities	151,747	350,000	+198,253
11.	General Support Facilities	336,554	40,000	-296,554
	TOTAL	$21,741,910	$9,157,000	$-12,584,910

	Type of Improvement	Unobligated FY 1973 Carryover	FY 1974 First Supplemental Appropriation	FY 1974 Current Program
1.	Public Affairs Facilities	$ 73,203	$ - 0 -	$ 73,203
2.	Legal Affairs Facilities	27,837	- 0 -	27,837
3.	Judiciary Facilities	1,012	- 0 -	1,012
4.	Education Facilities	3,530,981	1,280,000	4,810,981
5.	Public Health Facilities	383,561	4,650,000	5,033,561
6.	Transportation and Communications Facilities	6,246,051	2,200,000	8,446,051
7.	Resources and Development Facilities	390,865	- 0 -	390,865
8.	Community Development Facilities	361,966	330,000	691,966
9.	Water, Sewerage and Power Facilities	1,478,133	300,000	1,778,133
10.	Maintenance and Rehabilitation Facilities	151,747	- 0 -	151,747
11.	General Support Facilities	336,554	- 0 -	336,554
	TOTAL	$12,981,910	$8,760,000	$21,741,910

1. Public Affairs Facilities - $ - 0 -

No funds are requested in FY 1975 for Public Affairs Facilities.

2. Legal Affairs Facilities - $ - 0 -

No funds are requested in FY 1975 for Legal Affairs Facilities.

3. Judiciary Facilities - $ - 0 -

No funds are requested in FY 1975 for Judiciary Facilities.

4. Education Facilities - $1,467,000

Funds requested in FY 1975 will be used for:

a. Elementary - Marianas	$ 130,000
b. Elementary - Ponape	156,000
c. Elementary - Truk	80,000
d. Secondary - Marshalls	749,000
e. Secondary - Ponape	164,000
f. Secondary - Truk	188,000
Total	$1,467,000

a. Elementary - Marianas - $130,000

The Marianas District is so critically short of elementary school classroom space that double sessions are required to give all students at least a half-day of elementary education.

The District has elected to use an emergency type classroom design that utilizes wood frame construction and a corrugated tin roof on a concrete floor slab. These can be very quickly erected at a very low unit cost. Their useful life of more than fifteen years allows ample time for the District to replace them with more permanent structures at an orderly pace.

The funds requested in FY 1975 will allow fourteen such classrooms to be built at various sites plus an eight-toilet facility to be added at the Chalan Kanoa school. The construction estimate also includes lighting and collateral equipment for the classrooms. The additional spaces provided should allow for the ending of double sessions in FY 1975.

b. Elementary - Ponape - $156,000

The Ponape District is served by 43 public elementary schools and four private mission schools. A projected increase of 150 pupils entering elementary schools will require that six additional classrooms be built during FY 1975.

The $156,000 requested in FY 1975 will provide funding for two classrooms to be built at each of three sites - Iohl and Sekere on Ponape Island, and at Lelu on Kusaie. These classrooms will be single story concrete block buildings of a standard design to be added at existing school sites.

c. Elementary - Truk - $80,000

Funds requested in FY 1975 will be used to build three concrete block classrooms to replace one wooden and two thatch roof structures now being used as classrooms for the 72 children of Pulusuk Island.

A 10,000 gallon water tank and latrines are also included in the $71,000 project.

The remaining funds, $9,000, will be used to improve four classrooms on Puluwat. Partitions will be installed between the rooms, and a water tank and latrines will be built. Puluwat has an elementary enrollment of 133 students.

d. Secondary - Marshalls - $749,000

Completion of Phases I and II of the new Jaluit Atoll High School will provide classroom spaces for 570 students and dormitory spaces for 256. About 45% of the students will be accommodated in the dormitories but it is projected that close to 90% of all students will need to be boarded in the dormitories. Jabwor Island, the site of the high school, has very limited private facilities for boarding students so that dormitory capacity will have to grow as total enrollment increases.

The $749,000 will fund the construction of a two-story dormitory building with space for 256 students. This will bring total dormitory capacity to 512 students and meet the anticipated demand.

Additional funding will be sought in future years for a library, an administration building, and additional vocational facilities. The completed 600 student complex will relieve the pressure on the District's other high school on Majuro by allowing students to get a secondary education without crowding into the district center.

e. Secondary - Ponape - $164,000

The Ponape Island Central School (PICS) will have a total capacity of about 750 in FY 1975. While the campus has been growing, its capacity is still not adequate to meet the demand for secondary education of students from Ponape proper and from the southern outer islands.

It is proposed to use the FY 1975 request of $164,000 to build an additional five general purpose classrooms at the PICS campus. Upon completion of these facilities, total enrollment can grow to 875 students, an increase of 125 student spaces.

f. Secondary - Truk - $188,000

The Mortlocks High School is situated on Satawan, about 170 miles from the district center. The existing facilities include six metal classrooms plus classrooms and dormitories with thatch roofs. Most of these facilities will be replaced with Trust Territory and Congress of Micronesia funding through FY 1973. The FY 1975 request for $94,000 will provide four additional classrooms of concrete block design and will allow enrollment to increase from a current 225 to 325 by 1976.

The Weipat High School is another of the satellite junior high schools. It is situated on the island of Ulul about 170 miles northwest of Moen. Funds of $94,000 are being requested in FY 1975 for four additional concrete block classrooms for a total of 10 teaching stations at the site and an enrollment of about 250 students.

5. Public Health Facilities - $2,895,000

Funds requested in FY 1975 will be used for:

a. Yap District Hospital	$2,245,000
b. Saipan Hospital Renovation	60,000
c. Outpatient Clinic, Palau	590,000
Total	$2,895,000

a. Yap District Hospital - $2,245,000

The dilapidated facility now in use as the Yap District Hospital does not lend itself to renovation or expansion. The people of Yap have indicated that replacement of the hospital is the single most important capital improvement project for their islands. The FY 1975 request for $2,245,000 will be used to construct and equip a new hospital in the municipality of Weloy.

Preliminary design work indicates that a concrete block hospital of 45-50 beds can be constructed within the FY 1975 appropriation. The new facility will be complete with surgical and delivery rooms; outpatient, EENT and emergency rooms; laboratories and X-ray rooms; a dental clinic and a public health clinic; and administrative offices. The hospital is expected to be ready for public use by late FY 1976.

b. Saipan Hospital Renovation - $60,000

A survey done last year on Saipan's Dr. Torres Hospital revealed that the mechanical and electrical systems as well as the structure itself, have deteriorated to the point where rather extensive renovation is needed. The electrical system, for example, was designed to meet the needs of 25 years ago and not for the demands placed on it by sophisticated modern medical equipment. The system has become overloaded and potentially dangerous and will be replaced during FY 1975.

c. Outpatient Clinic, Palau - $590,000

The present layout of the District Center Hospital Complex does not permit efficient handling of the daily caseload which now averages 75-80 inpatient and 160 outpatient visits. Renovation efforts have already begun with a new pediatrics ward almost completed.

The renovation work will continue in FY 1975 with the building of a new outpatient clinic. This will free up space for the expansion and remodelling of the obstetrics ward which will house the mother-child health care services program. An environmental health office will be provided. The X-ray rooms, emergency rooms, surgical operating rooms, the pharmacy, and the laundry will also be relocated and expanded.

The total cost of the outpatient clinic building and the interior remodelling is estimated at $590,000 in FY 1975. The renovated 120-bed hospital will provide the district with ample health care facilities for the foreseeable future.

6. Transportation and Communications Facilities - $1,139,000

Funds requested in FY 1975 will be used for:

a.	Roads, Saipan	$ 55,000
b.	Roads, Palau	97,000
c.	Roads, Ponape	127,000
d.	Airfield, Rota	185,000
e.	Airfield, Ponape	250,000
f.	Communications Facilities	200,000
g.	Harbor and Dock A&E Design, Yap	225,000
	Total	$1,139,000

a. Roads, Saipan - $55,000

The funds requested will be used to upgrade the paving of approximately three miles of road on Saipan. This particular segment of road will see increasingly heavy use since it connects with the access road to the new International Airport.

b. Roads, Palau - $97,000

A wooden bridge connects the main sections of the District Center with the quarry, the marine resources facilities, and the commercial port on Malakal Island. The bridge carries large numbers of vehicles, some of them heavily loaded trucks which have weakened the structure.

A total of $97,000 will be used to shore up the pilings supporting the bridge. The pilings will be encased in concrete and replaced where needed, to insure that this vital transportation link remains in useable condition.

c. Roads, Ponape - $127,000

A sum of $127,000 is being requested for paving of 3-4 miles of existing roads in the district center. Much of the major excavation for the water and sewer systems will be complete by FY 1975 so that road paving can begin. The type and thickness of the pavement will vary according to traffic flows along road segments. The provision of a sealed road surface will be especially beneficial in Ponape since that District receives the heaviest rainfall in the Trust Territory.

d. Airfield, Rota - $185,000

Air traffic at the Rota Airfield has increased to the point where there are now daily flights. The increase in air cargo capacity has made it much easier for the farmers of Rota to move their produce to markets on Guam and Saipan.

The runway surface is not holding up well under this increased load, especially since the heavier B-727 jet is being used on four of the seven flights per week. Holes develop in the runway causing air service to be suspended until repairs are made.

The $185,000 requested in FY 1975 will be used to stabilize the runway surface. This will ensure continuous service to avoid losses to the farmers from spoilage now incurred when the plane cannot land.

e. Airfield, Ponape - $250,000

The Ponape Airport measures only 6,200' in length and is unpaved. These are unsuitable conditions for a jet aircraft, especially in Ponape where the rains are so heavy.

The funds requested in FY 1975 will be used for advance planning for extending and paving the airstrip. Construction funds will be sought in a later year. The feasibility of FAA participation in the funding of the airfield improvements will also be explored.

f. Communications Facilities - $200,000

Of the funds requested in FY 1975, $175,000 will be used to upgrade the Guam/Saipan Troposcatter System. Demands from government and commercial sources have grown rapidly so that the original six-channel system was recently doubled to twelve channels. The FY 1975 funds will be used to double capacity again to provide government demand and allow channels to be leased to commercial interests, with the resulting revenues being used to offset operation and maintenance costs of the new system.

The balance of the FY 1975 request, $25,000, will be used to procure replacement radios, generators, and other equipment for the outer islands communications system. This equipment is operated under extremely unfavorable conditions due to the corrosive salt spray environment and by the inability to get trained maintenance people to the remote islands on a regular basis. The equipment must be replaced periodically in order that the outer islands people have a link to the district center in times of medical emergencies and natural disasters.

g. Harbor and Dock A&E Design, Yap - $225,000

The funds requested will be used for the design of a new harbor and dock facility for Yap. The present harbor presents serious navigation problems for even the small interisland ships. Few of the ocean going ships try to tie up at the dock so that cargo must be lightered. The dock face itself is crumbling and there is a serious shortage of warehouse space.

A new facility will be designed for the opposite side of the island. Construction funds will be requested as early as possible in the future.

7. Resources and Development Facilities - $80,000

Funds requested in FY 1975 will be used for:

a. Fisheries Facility - Kusaie	$40,000
b. Marine Resources, Truk	40,000
Total	$80,000

a. Fisheries Facility, Kusaie - $40,000

The funds requested in FY 1975 will be used to construct a small blast freezer-reefer plant for the island of Kusaie. The unit's 10-ton capacity will allow the islanders to freeze and store the catch for their own use and to hold any surplus for shipment to the district center market.

b. Marine Resources, Truk - $40,000

These funds will be used to purchase a boat of 36 to 40 feet for fishing operations within the Truk lagoon. The boat will be equipped with modern electronic gear and a variety of nets and gear for inshore and offshore fishing. The boat will have a full-time captain and engine room operator but the fishing will be done by men from the outer islands of the lagoon. Proceeds from the catch will provide the villages with income as well as defray operating expenses.

8. Community Development Facilities - $1,392,000

Funds requested in FY 1975 will be used for:

a. Bikini Rehabilitation Program	$ 667,000
b. Civic Action Teams	650,000
c. Eniwetok Planning	75,000
Total	$1,392,000

a. Bikini Rehabilitation Program - $667,000

The reconstruction of a community on Bikini Atoll in the Marshall District will be continued in FY 1975 at a cost of $667,000. It has been estimated that a total of 78 housing units plus outbuildings will be needed for the resettlement of the 356 Bikini inhabitants now living on Kili Island. Schools, health facilities, roads, a dock, warehouses, etc., and replanted food crops and coconut groves must be provided to make the island habitable.

The first 40 housing units are nearing completion and the coconut trees are growing well. Resettlement of the first group of families is expected early in 1974 although it will take several years to complete all the public and private facilities. The 480-mile distance to the district center creates serious logistic problems which have delayed the construction schedule.

The FY 1975 funds will be used to finish the construction of the planned 78 housing units, each unit consisting of a core house, an outhouse, a bath house, a cook house and a water catchment system. Rebuilding of the public facilities will be undertaken. The budget estimate also includes costs for maintenance and replanting of coconuts and food crops and for moving costs to transport people and their household goods from Kili to Bikini.

b. Civic Action Teams - $650,000

A total of $650,000 is requested in FY 1975 to allow five Civic Action Teams to be active, one in each district except the Marianas. The Teams that have worked in the Marianas District, where there are few outer island residents, will have completed virtually all the identified small projects by the end of FY 1974. The Team now in the Marianas will be sent home at the end of FY 1974 since there would not be enough work for another full year.

The Teams provide two very important services to the districts. The Teams are self-contained units which bring their own equipment to project sites. They are able to carry on projects in remote areas without requiring the use of very scarce Trust Territory construction equipment. During this past year, the Teams completed a dam and water distribution system on Kusaie; built a dispensary and community buildings on the southwest Palau Islands; erected a large dispensary on Wotje, Marshalls District; along with other small projects in all districts.

Training of the local people in construction skills is another important service provided by the Teams. At each project site, residents are recruited to participate in the work and thus receive valuable experience in construction methods and in the use of tools and equipment.

The total cost of the Teams is about four times the Trust Territory's share; the value of the Teams' output in terms of facilities built, training rendered, and the goodwill generated far exceeds the cost.

c. Eniwetok Planning - $75,000

A total of $75,000 is requested in FY 1975 to provide for a master plan to be used as a basis for developing both immediate and long range programs for the rehabilitation and resettlement of Eniwetok Atoll in the Marshalls District. It will involve, to the maximum extent possible, the Eniwetokese people, through their planning council, in the decision making process. It will provide cost estimates to be used by the Department of the Interior and the Trust Territory Government in budgeting for the subsequent rehabilitation program.

9. Water, Sewer, and Power Facilities - $1,794,000

Funds requested in FY 1975 will be used for:

a.	Power, Marianas	$ 709,000
b.	Power, Ponape	135,000
c.	Power, Truk	110,000
d.	Water, Marianas	10,000
e.	Water, Ponape	80,000
f.	Water, Truk	665,000
g.	Water Resources Study	85,000
	Total	$1,794,000

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a. Power, Marianas - $709,000

In August, 1972, a fire at the existing power plant destroyed almost 80% of Saipan's generating capacity. Emergency generators borrowed from military and civilian sources on Guam provided limited power while a new power plant was being rushed to completion.

The new power plant and its generators, funded with prior years' appropriations, have now brought total generating capacity to about 10,000 KW. This represents an increase of 2,300 KW over the pre-fire level. Saipan now has an emergency reserve which will allow one of the large generators to be taken out of service for maintenance and repair without curtailing power use. However, the increased capacity is not great enough to expand service or reduce the backlog of applicants awaiting for power.

Power consumption on Saipan is increasing at an alarming rate (up 1,400 KW in one year). Additional power is urgently needed and $627,000 is requested in this budget to purchase a generator with a rated capacity of about 2,600 KW.

Recently new public facilities such as the additional elementary classrooms, water and sewer facilities, and airport lighting have placed new demands for power. Home use of electricity is also on the increase as more and more modern homes are built and more and more residents buy and use electrical appliances. Commercial business requirements, including tourist related facilities, are increasing almost daily. It is anticipated that the addition of the requested 2,600 KW generator will no more than meet demand at time of installation, with an emergency reserve to allow a large generator to be out for maintenance and repairs.

The FY 1975 request will also provide $82,000 to be used to extend power lines to villages on Saipan and Rota. New home building is proceeding quite rapidly on Saipan so that an additional five miles of village distribution lines will be built for $75,000 to keep pace with growth in the Garapan and Tanapag areas. One mile of distribution line will be built at a cost of $7,000 to electrify Teneto, a new subdivision on Rota.

b. Power, Ponape - $135,000

The FY 1975 funds will be used to extend distribution lines in two areas; to the Sokehs Island area on Ponape proper and to the villages of Lelu, Tofol and Tafunsak on the outer island of Kusaie. The power line extension is expected to bring the benefits of electricity for the first time to more than 2,500 people on the two islands.

c. Power, Truk - $110,000

The FY 1975 request will be used to purchase and install three generators and provide for line work on Satawan, a newly created subdistrict center of Truk. These small generators will be purchased to furnish power to the administrative offices, the Satawan Junior High School, an elementary school, and to some of the 100 private homes on the island.

d. Water, Marianas - $10,000

The island of Rota in the Marianas District has a natural water cave filled by a spring. The purpose of the $10,000 being requested is to fund an enlargement of a Japanese-built impoundment wall which traps the water as it flows from the cave. This will significantly increase the water supply to the 1,100 residents of Songsong Village.

e. Water, Ponape - $80,000

A new water system is already under construction on Ponape, funded by prior years' appropriations. The $80,000 requested in FY 1975 will be used to provide laterals off the main lines. The laterals, to be laid down in Kolonia and four adjacent villages, will allow more than 1,000 additional people to tap into the central system.

f. Water, Truk - $665,000

Phases I and II of the Moen island water system are well underway and will provide water to the western and northwestern sections of the island. Wells have already been sunk and pumping stations and distribution lines are being put into place.

The FY 1975 request will be used to extend the system to the Sapuk Peninsula, the eastern tip of the island. A one-million gallon tank will be built at Neano to increase reservoir capacity and to allow for future expansion of the system on the western and southern parts of the island. More than 1,000 additional people in the two areas will be able to tie into the system.

g. Water Resources Study - $85,000

The availability of fresh water imposes quite rigid limits on the number of people who can live on an island and on the growth rate of its economy. While it is possible to overcome a power shortage by adding generators and a land shortage by building multi-story buildings, there is no economical way to ship or manufacture potable water. Therefore, an island community must know how much water it has and can use so that it can plan for development.

The Trust Territory Government has been engaged in a cooperative effort with the U.S. Geological Survey to measure water resources for several years, usually funded as part of the feasibility and design studies for a major new water and sewer system. Most of these systems are now under construction but there is a need to continue hydrologic surveys and to develop the data base required for future expansion of the systems.

The USGS provides engineering, training, instrumentation, and equipment for the studies and analyzes and processes field data for publication. USGS personnel will also assemble water supply data from old records of the missions, the Japanese administration, and the U.S. military. The Trust Territory supplies personnel to install, maintain and collect data from surface water, ground water, and rainfall gaging stations. The total cost to the Trust Territory Government during FY 1975 will be $85,000, with the USGS contributing a like amount in man-hours, computer time, and material.

10. Maintenance and Rehabilitation Facilities - $350,000

Funds requested in FY 1975 will be used for:

a.	Emergency and Minor Construction	$200,000
b.	Heavy Construction Equipment	115,000
c.	Public Works Warehouse and Office, Kusaie	35,000
	Total	$350,000

a. Emergency and Minor Construction - $200,000

Funds are requested in this category to provide for unforeseen minor projects and projects which arise as a result of some emergency. Some projects funded in FY 1973 include $14,000 for repairs to the Ebeye Dock; $25,000 as the Trust Territory's share of building meeting chambers for the Congress of Micronesia; and $28,000 to replace a key water treatment tank which had failed on Yap.

The physical plant of the Trust Territory faces an always-present threat of damage from accidents and destructive natural forces. Public buildings in all districts are threatened by frequent tropical storms and typhoons. Since the size of the physical plant is growing each year, the likelihood that emergencies will arise is also growing. The $200,000 requested in FY 1975 will accommodate some of the many requests from the districts for emergency and minor construction work.

b. Heavy Construction Equipment - $115,000

Heavy construction equipment is acquired and maintained by the Trust Territory Government for use by six District Public Works Departments and for rental to local contractors, municipalities, and private users.

Procurement of excess military equipment has resulted in significant savings to the government in acquiring its stock of heavy equipment. This supply source is becoming exhausted so that replacement equipment will have to be purchased from commercial sources at much higher cost.

The $115,000 requested in FY 1975 will be used to replace worn out heavy construction equipment for use in all districts.

c. Public Works Warehouse and Office, Kusaie - $35,000

The growing number of government construction programs on Kusaie, an important subdistrict center of Ponape, requires that additional work and storage space be provided. At present, part of the Public Works complex is housed in open-sided, tin-roofed shacks in congested Lelu. The FY 1975 request will be used to safeguard government-owned equipment and materials and allow the dilapidated shacks to be torn down.

11. General Support Facilities - $40,000

Funds requested in FY 1975 will be used for:

a. Supply Warehouse and Office, Kusaie $40,000

a. Supply Warehouse and Office, Kusaie - $40,000

The level of government activity on Kusaie is increasing. The larger school system, new hospital, and the increasing level of government construction requires that additional storage space be provided for supplies and materials. The FY 1975 request of $40,000 will allow a large prefabricated warehouse to be built in Tofol Village.

The warehouse will be located at the new government complex which will also include administrative offices and a public works facility. The new facilities in Tofol will allow ramshackle buildings in congested Lelu to be abandoned.

III. ECONOMIC DEVELOPMENT LOAN FUND:

FY 1974 $1,000,000, FY 1975 $1,000,000: Increase - 0 -

The amount of $1,000,000 is required in FY 1975 for the Economic Development Loan Fund under the authority of Public Law 92-257.

In recent years substantial investment has been made in infrastructure for Micronesia such as water, sewer, power and airfields. More is planned in the coming years. This infrastructure investment has a bearing on future productivity if Micronesia can achieve levels of capital investment which can build a solid base of development on the infrastructure. Local private capital from savings or from present private or governmental borrowing capacities cannot begin to meet the total need. Development of Micronesia today is dependent on the initiative and assistance of the United States in aiding Micronesia entrepreneurs to obtain adequate capital for investment.

The management of the Economic Development Loan Fund is vested in a Board of Directors appointed by the High Commissioner. Each district also has a District Board of Directors appointed by the District Administrator. The District Boards review all loan applications originating in their districts and are authorized to make direct loans up to $10,000. Loans of over $10,000, if approved, are forwarded to Headquarters where priorities are determined and the loans are made.

Loans may be made to corporations and cooperative associations authorized to conduct business in the Trust Territory; local governments; or citizens or residents of the Trust Territory who are engaged in agriculture, manufacturing, commercial fishing, services, or improvements of real property for industrial purpose when specifically determined by the Board to be beneficial, desirable and necessary. The loan must create employment, replace imports, reduce consumer prices, create needed facilities and services, or create exports.

Although the Economic Development Loan Fund was established in FY 1963, the Trust Territory Government has been lending to private enterprises since 1956 when a revolving fund was made available by the U.S. Congress for loans to locally owned trading companies. This revolving fund was transferred to the Economic Development Loan Fund which has since been augmented by appropriation until it has reached a current capitalization of approximately $2.9 million. Since 1964, 360 direct loans for a total of $2.7 million and 91 guaranteed loans totalling $3.0 million have been made.

With a $1 million appropriation for FY 1975, the Board of Directors of the Economic Development Loan Fund would make loans in accordance to its established project priorities approximately as follows:

Marine Resources	$ 300,000
Agriculture	200,000
Working Capital/Business Expansion	100,000
Tourism	200,000
Miscellaneous Services	100,000
Cottage Industries (Handicrafts)	100,000
Total	$1,000,000

Public Law 92-257 authorizes funding for the Trust Territory Economic Development Loan Fund up to a total of $5,000,000. It is projected that with a total capitalization of $5 million, there would be a total of roughly $5.8 million in direct loans and $7 million in loans made by commercial banks with an EDLF

guaranty. The loan emphasis will continue to be in the areas of marine resources, agriculture and tourism.

Identification of viable economic projects suitable for EDLF financing will continue with emphasis upon broadening the economic base of Micronesia.

Marine resources is projected to receive about 30% of the Fund for the development of the inshore and offshore fisheries development. Loans to this sector would finance purchase of fishing boats and accessories, freezers and working capital to maintain shoreside operations, supplies and the like.

Viable agricultural projects would be financed to expand food and meat production. Loans would finance poultry and livestock projects, vegetable production, etc. Roughly 20% of the Fund would be injected into this sector.

The most visible impact of the Fund would be in the development of the tourism industry. It is estimated that roughly 20% of the Fund would be utilized in financing tourist-oriented activities such as the expansion of local markets for agricultural, marine and hadicraft products; lodging, entertainment and recreational services.

The commercial sector of the economy which includes working capital, business expansion, miscellaneous services, cottage industries, etc., will receive about 30% of the Fund.

Two-thousand-six-hundred or more new jobs would be created by the influx of EDLF capital. The largest number of the new jobs created will be in semi-skilled, unskilled, seasonal, and miscellaneous categories. This means that many underemployed Micronesians will be immediately drawn out of the Territory's idle labor pool into productive employment and there should be less dependence upon government employment.

Economic Development Loan Fund
Balance Sheet
June 30, 1973

ASSETS

Cash:

Checking Account, Bank of America		50,314.09
Time Certificate of Deposit - B/A @6%, due 10/26/73		100,000.00
Time Certificate of Deposti - B/A @6%, due 10/26/73		100,000.00
Time Certificate of Deposit - B/A @7-1/8%, due 12/22/73		100,000.00
Time Certificate of Deposit - B/A @7-3/8%, due 12/27/73		100,000.00
		$ 450,314.09
Loans Receivable	$1,695,561.21	
Less: Reserve for uncollectible loans	233,680.29	$ 1,461,880.92
Account Receivable (Guaranteed Loans in Default)		44,130.42
Total Assets		$ 1,956,325.43

CAPITAL

Appropriation	$1,893,909.22	
Retained Earnings	62,416.21	$ 1,956,325.43
Total Capital		$ 1,956,325.43

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Economic Development Loan Fund
Cash Available for Direct Loans
June 30, 1973

Total Cash	$ 450,314.00
Less: Cash reserve required for Guaranteed Loans (25% of $735,589)	183,897.00
CASH AVAILABLE FOR DIRECT LOANS	$ 266,417.00
Less: Loans approved by Economic Development Loan Fund Board, but not yet consummated:	
Direct Loans	$ 28,126.00
Guaranteed Loans (25% of $148,100)	37,025.00
Cash available for further loans	$ 201,266.00
Less: Reserve for districts' use	$ 44,572.00
NET CASH AVAILABLE FOR LOANS	$ 156,694.00

ITEMIZATION OF ESTIMATE

Department of the Interior
Appropriation Title: Trust Territory of the Pacific Islands, Territorial Affairs

	FY 1973 Actual	FY 1974 Estimate	FY 1975 Estimate	Increase + Decrease -
Program and Financing:				
Total obligations	$59,439,948	$72,349,365	$61,000,000	$-11,349,365
Unobligated balance, start of year	-13,903,313	-14,463,365	---	+14,463,365
Unobligated balance, end of year	14,463,365	---	---	---
Budget authority	$60,000,000	$57,886,000	$61,000,000	$ +3,114,000
Object Classification:				
11 Personnel compensation	$3,334,000	$2,993,000	$2,906,000	$-87,000
12 Personnel benefits	217,000	195,000	191,000	-4,000
21 Travel and transportation of persons	98,000	192,000	227,000	+35,000
22 Transportation of things	8,000	1,000	2,000	+1,000
23 Rent, communications, and utilities	6,000	6,000	6,000	---
24 Printing and reproduction	2,000	6,000	9,000	+3,000
25 Other services	61,000	72,000	56,000	-16,000
26 Supplies and materials	8,000	8,000	11,000	+3,000
31 Equipment	6,000	15,000	19,000	+4,000
41 Grants, subsidies, and contributions	55,699,948	68,861,365	57,573,000	-11,288,365
Total obligations	$59,439,948	$72,349,365	$61,000,000	$-11,349,365

PERSONNEL SUMMARY

	1973 Actual	FY 1974 Estimate	FY 1975 Estimate
Total number of permanent positions	204	171	167
Average paid employment	191	167	161
Average GS grade	10.6	10.9	10.9
Average GS salary	$16,023	$17,673	$17,905
Average salary of ungraded positions	$14,007	$14,477	$14,477

Analysis of Funds Available Within Trust Territory from Other Federal Agencies

Activity	Federal Grantor Agency	Name of Grant (Authorizing Legislation)	FY 1974 Estimate	FY 1975 Estimate
Health				
Comprehensive Health Planning	HEW - HSMHA	Public Health Services Act	$ 90,000	$ 90,000
Public Health Action Programs	HEW - HSMHA	Public Health Services Act	374,000	374,000
Mental Health	HEW - HSMHA	Public Health Services Act	66,000	66,000
Prevention and Control of Communicable Disease	HEW - HSMHA	Public Health Services Act	32,000	32,000
Maternal and Child Health	HEW - HSMHA	Social Security Act, Title V	123,000	123,000
Crippled Children Services	HEW - HSMHA	Social Security Act, Title V	160,000	160,000
Mental Retardation	HEW - HSMHA	Social Security Act, Title V	10,000	10,000
Venereal Disease Control	HEW - HSMHA	Public Health Services Act	35,000	35,000
Alcohol Abuse/Alcoholism	HEW - HSMHA	Alcoholic & Narcotic Rehab. Act	55,000	55,000
Drug Abuse	HEW - HSMHA	Alcoholic & Narcotic Rehab. Act	15,000	15,000
Vocational Rehabilitation	HEW - HSMHA	Vocational Rehabilitation Act	125,000	125,000
Handicapped Children	HEW - HSMHA	Vocational Rehabilitation Act	35,000	35,000
Water Pollution Control	EPA - ORM	Water Pollution Control	75,000	75,000
Total Health Program			$1,195,000	$1,195,000
Education				
Elementary and Secondary Education Programs	HEW - USOE	ESEA Titles I, II, III, and IV	$1,512,000	$1,425,000
Library Services and Construction	HEW - USOE	LSCA Titles I, II and III	68,000	46,000
Adult Education	HEW - USOE	Adult Basic Education Act	82,000	82,000
Manpower Training	HEW - USOE & DOL - Manpwr. Adm.	Manpower Development and Training Act	174,000	150,000
Education Professional Development	HEW - USOE	Higher Education Act, Title V	15,000	15,000
Vocational Education	HEW - USOE	Vocational Education Act	318,000	300,000
College Work-Study	HEW - USOE	Higher Education Act, Title IV	117,000	117,000
Educational Opportunity	HEW - USOE	Higher Education Act, Title IV	18,000	18,000
Education of the Handicapped	HEW - USOE	Education Handicapped Act (ESEA VI)	80,000	80,000
Emergency School Assistance	HEW - USOE	Emergency School Assistance Act	204,000	204,000
Special Food Services	USDA - FNS	National School Lunch Act	22,000	22,000
Total Education Program			$2,610,000	$2,459,000

Activity	Federal Grantor Agency	Name of Grant (Authorizing Legislation)	FY 1974 Estimate	FY 1975 Estimate
Resources and Development				
Mariculture	NOAA - NMFS	Sea Grant Program	$ 70,000	$ - 0 -
Oceanic Conditions Study	DOI - USGS	U.S. Geological Survey Program	14,000	14,000
Animal Health Services	DOD - USAF	(Technical Assistance)	30,000	30,000
Total Resources and Development Program			$ 114,000	$ 44,000
Public Works				
Water Resources Study	DOI - USGS	(USGS/TTPI Contract)	$ 57,000	$ 85,000
Disaster Control Office	FDAA	Disaster Relief Act	25,000	25,000
Sewage Treatment Plant Operators Training	EPA - ORM	Federal Water Pollution Control Act	80,000	80,000
Airport Planning	FAA	Airport and Airway Development Act	75,000	100,000
Total Public Works Program			$ 237,000	$ 290,000
Public Affairs				
Territorial Economic Opportunity Office	OEO	Economic Opportunity Act	$ 10,000	$ - 0 -
Micronesian Legal Services Program	OEO	Economic Opportunity Act	600,000	600,000
Community Action Agencies	OEO	Economic Opportunity Act	519,000	- 0 -
Head Start Program	HEW - OCD	Economic Opportunity Act	185,000	185,000
Trust Territory Office on Aging	HEW - SRS	Older Americans Act	178,000	178,000
Foundation for the People of the South Pacific	HEW - OCD	Economic Opportunity Act	50,000	- 0 -
Neighborhood Youth Corps	DOL - Manpwr. Adm.	Economic Opportunity Act	80,000	80,000
Youth Services Coordination	HEW - SRS	Juvenile Delinquency Prevention and Control Act	25,000	25,000
Community Development Training	HUD - Com. Dev.	Housing and Urban Development Act, Title VIII	20,000	- 0 -
Total Public Affairs Program			$1,667,000	$1,068,000

Activity	Federal Grantor Agency	Name of Grant (Authorizing Legislation)	FY 1974 Estimate	FY 1975 Estimate
Administration				
Public Employment Program	DOL - Manpwr. Admin.	Emergency Employment Act	$ 296,000	$ - 0 -
Donated Food Commodities	USDA - FNS	Agricultural Act of 1949	1,310,000	505,000
National Science Foundation	NSF	National Science Foundation Act	15,000	15,000
Total Administration Program			1,621,000	520,000
Peace Corps			1,014,000	1,014,000
GRAND TOTAL			$8,458,000	$6,590,000

Comparison FY 1974 as Justified with Current Submission

	FY 1974 in printed in Cong. Justif.	Adjustments for Leased Housing and Furniture and Fixtures	Minor Program Adjust.	Regular Approp. Reduction	First Supplemental Appropriation	TT FY 1974 Program in FY 1975 Budget Est.
I. DIRECT APPROPRIATION:						
A. High Commissioner's Office	$ 411,000	$ - 0 -	$ - 0 -	$ - 0 -	$ - 0 -	$ 411,000
B. Judiciary	400,000	- 0 -	- 0 -	- 0 -	- 0 -	400,000
Total - Direct Appropriation	811,000	- 0 -	- 0 -	- 0 -	- 0 -	811,000
II. GRANTS:						
A. OPERATIONS:						
1. Health Services	7,594,100	-18,800	-17,200	- 0 -	- 0 -	7,558,100
2. Education	12,834,100	-91,000	+96,400	- 0 -	- 0 -	12,839,500
3. Public Affairs	2,107,000	-7,000	-17,700	- 0 -	+550,000	2,632,300
4. Resources and Development	4,760,400	-27,700	-8,700	- 0 -	+800,000	5,524,000
5. Protection to Persons and Property	2,359,600	-10,000	+54,600	- 0 -	- 0 -	2,404,200
6. Administration	5,038,100	-29,700 +230,000 1/	-17,400	- 0 -	- 0 -	5,221,000
7. Transportation and Communications	3,246,700	-12,200	-12,000	- 0 -	- 0 -	3,222,500
8. Public Works	8,025,000	-33,600	-78,000	- 0 -	- 0 -	7,913,400
Total - Operations	45,965,000	- 0 -	- 0 -	- 0 -	+1,350,000	47,315,000
B. CAPITAL IMPROVEMENTS	8,224,000	- 0 -	- 0 -	-8,224,000	+8,760,000	8,760,000
Sub-Total - Grants	54,189,000	- 0 -	- 0 -	-8,224,000	+10,110,000	56,075,000
Sub-Total - Direct and Grants	55,000,000	- 0 -	- 0 -	-8,224,000	+10,110,000	56,886,000
III. ECONOMIC DEVELOPMENT LOAN FUND	1,000,000	- 0 -	- 0 -	- 0 -	- 0 -	1,000,000
TOTAL - NEW OBLIGATIONAL AUTHORITY	$56,000,000	$ - 0 -	$ - 0 -	$-8,224,000	$+10,110,000	$57,886,000

1/ For the past few years the Trust Territory has budgeted $230,000 for the leasing of houses and for the replacement of furniture and fixtures in Government-owned as well as leased houses in the end-use activities requiring staff housing. The $230,000 was prorated through all budgets on the basis of the numbers of U.S. staff budgeted. This method of financing has become increasingly cumbersome. As more and more Micronesians move into key positions, more and more Micronesians have moved into staff housing. Micronesians recruited to work in districts other than their own or recruited from other islands in their home district are eligible to occupy Government-owned quarters, or Government-leased quarters, or for a living quarters allowance (in cases where Government-owned or leased quarters are not available). It is now unrealistic to continue charging the end-use activities on the basis of U.S. staffing budgeted. With this budget, the full $230,000 is transferred into the Leased Housing Loan Fund budget to be used for the same purpose as originally intended. This $230,000 is over and above the $100,000 budgeted directly to the Leased Housing Loan Fund in FY 1974. The budget activity "Leased Housing Loan Fund" first received funding of $100,000 in the FY 1973 Regular appropriation. At that time we were already leasing 44 units and the Government owned 585 units of staff housing. The $100,000 was for the purpose of stimulating the building of additional units and funding costs of the new leases.

Publications Division
Estimated Revenues and Obligations
Fiscal Year 1975

	FY 1975 Estimate
REVENUES	$289,700
Obligations by Object Classification:	
Personnel Services - U.S.	24,500
Personnel Services - Micronesian	84,500
Personnel Benefits	4,100
Travel	4,000
Printing and Production (Contracted)	6,800
Rental, Communication and Utilities	27,000
Other Services	1,000
Supplies and Materials	130,000
Acquisition of Capital Equipment	7,800
Sub-Total - Estimated Obligations	$289,700
NET REVENUES	$ - 0 -

CONGRESS OF MICRONESIA

Pursuant to the Secretary of Interior's Order 2882, the Congress of Micronesia was created on September 28, 1964, consisting of two Houses, the Senate and the House of Representatives. The Senate is composed of 12 Senators, two from each of the six administrative districts, elected for a term of four years. The House of Representatives is composed of 21 Representatives, elected on a population basis from each of the twenty-one representative districts for a two-year term. Up to July 26, 1968, four amendments were issued which made several significant changes to the Order.

On December 27, 1968, Secretary Order 2918 was issued and consolidated previous Trust Territory Orders, and their amendments, into a single document. The Legislature provisions, formerly contained in Order 2882 and its four amendments, are Part III of Order 2918.

On August 13, 1970, Amendment No. 1 to Secretarial Order 2918 was issued which made several significant changes to the Order, among which are the lengthening of the present 45-day session to 50 days, and moving the Regular Session from July to January beginning with the 4th Congress, 1st Regular Session of the Congress of Micronesia.

Section 4 of the Order, as amended, sets forth the legislative authority of the Congress of Micronesia to enact tax laws and other revenue laws, and provides in part federal subsidy to the Congress of Micronesia. The pertinent Section 4 of the Order, as amended, reads as follows:

> "Section 4. Budget. Money bills enacted by the Congress of Micronesia shall not provide for the appropriation of funds in excess of such amounts as are available or estimated to be available from revenues raised pursuant to the tax laws and other revenue laws of the Trust Territory: Provided, that the Secretary of the Interior shall, from time to time, define the term 'revenue' as used herein, so as generally to exclude therefrom all sums attributable to user charge or service related reimbursements to the Government of the Trust Territory.
>
> Prior to his final submission to the Secretary of the Interior of requests for Federal funds necessary for the support of governmental functions in the Trust Territory, the High Commissioner shall prepare a preliminary budget plan. He shall submit such plan to the Congress of Micronesia or the appropriate authorized committee or committees thereof for its review and recommendations with respect to such portions as relate to expenditures of funds proposed to be appropriated by the Congress of the United States. With respect to such portions of the preliminary budget plan, the High Commissioner shall adopt such recommendations of the Congress or the appropriate authorized committee or committees thereof as he shall deem appropriate, but he shall transmit to the Secretary of the Interior all recommendations he has not adopted.
>
> For Fiscal Years 1971 and 1972, the Congress of Micronesia is authorized $125,000 from Federal grants appropriated to the Trust Territory of the Pacific Islands by the Congress of the United States, for operations and expenses of the Congress of Micronesia. For succeeding fiscal years, the Congress of Micronesia may request continuing or additional funds for its operations and expenses. Such requests shall be incorporated in the High Commissioner's preliminary budget plan for processing as set forth in this section."

Congress of Micronesia

Summary of Appropriations

		Public Law No.	Fiscal Year 1973
A.	Congress Operational Expenses		
1.	Senate and House Expenses	4C-87 and 5-18	$ 711,072.00
2.	Legislative Counsel's Office	4C-87	495,019.00
3.	Special Session	4C-87	60,000.00
4.	Outside travel for members and staff of Congress of Micronesia	4C-87	20,000.00
5.	Joint Committee on Future Status	4C-87 and 4C-88	155,000.00
6.	Joint Committee on Program and Budget Planning	4C-87	25,000.00
7.	Joint Committee on Marine Resources Development	4C-87	10,000.00
8.	Joint Committee on Administrative Appointments	4C-93	10,000.00
9.	Special Joint Committee concerning Rongelap and Utirik Atoll	4C-95	10,000.00
	Sub-Total		$1,496,091.00
B.	Other Programs		
1.	Trust Territory contribution to South Pacific Commission	4C-3	1,000.00
2.	Codification and printing of Trust Territory Code	4C-12	7,115.00
3.	Scholarships and other purposes	4C-63	350,000.00
4.	Social Security Administration	4C-64 and 5-9	91,500.00
5.	Payment of services rendered by Harrop A. Freeman	4C-81	5,000.00
6.	Customs and Tax Administration	4C-80	166,000.00
7.	Supplementing Administrative Costs of November 7, 1972 General Election	4C-82	10,000.00
8.	Improvement of Community College of Micronesia	4C-84	35,000.00
9.	To supplement and subsize the Copra Stabilization Fund	5-4	300,000.00
10.	Expenses of Micronesian students attending Maunoalu Campus of U.S. International University, State of Hawaii	5-19	35,000.00
11.	Purchase one Hander Fresh Wet Coconut Oil Processing Machine and continuing and expanding Vocational Agriculture Program	5-24	40,000.00
12.	Board of Directors of the Bank of Micronesia	5-40	50,000.00
13.	Trust Territory Census Act of 1973	5-38	40,000.00
	Projects of Marianas		
14.	Emergency funding for Saipan Power System	4C-89	200,000.00
15.	For various purposes for the Mariana Islands District and for other purposes	5-50	315,000.00

	Projects of Palau District		
16.	For various projects in Palau District	4C-54	$ 300,000.00
17.	For improvement of projects in Babelthaup Roads	5-31	225,000.00
18.	For mooring buoy for the Angaur Channel and purchasing a boat for Angaur Municipality	5-33	50,000.00
19.	For purchase of school buses for Koror Municipality, and for purchase of equipment and accessories for projects in Melekeok Municipality and for other purposes	5-49	50,000.00
	Project of Yap District		
20.	For certain public purchases and projects	5-10	297,250.00
	Project of Truk District		
21.	To carry out the purposes of P.L. No. 4C-53, to provide funds for other projects in Truk District and for other purposes	5-14	375,000.00
	Projects of Ponape District		
22.	To purchase a boat for the Ponape Producer's Cooperative Association	4C-83	10,000.00
23.	For certain improvement projects in Ponape District, and for other purposes	5-46	370,000.00
24.	For the maintenance of historical sites in Ponape District	4C-85	5,000.00
	Projects of Marshalls District		
25.	Public Works projects and Social Economic Development Program	4C-68	250,000.00
26.	Extending the new Majuro Airport runway by not less than 900 feet and paving the Majuro roads and other purposes	5-12	550,000.00
	All Districts		
27.	Operating expenses of the district fishing authorities in each district	5-22	90,000.00
28.	Loans to fishing cooperative associations and their members and for other purposes	5-23	300,000.00
29.	Supplemental appropriation for the payment of certain heavy equipment, machinery, projects, programs and other purposes	5-16	8,214.15
	Sub-Total		$4,526,079.15
	Total Appropriations		$6,022,170.15

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Estimated Revenues by Sources

Sources:	FY 1973 Actual	FY 1974 Estimate	FY 1975 Estimate
1. Public Law 4C-2			
Income Tax	$3,315,887	$3,600,000	$3,850,000
2. Public Law 4-22			
Business Licenses	32,918	30,000	35,000
Gasoline and Diesel Fuel Tax	75,846	75,000	75,000
Scrap Metal Export Tax	432	1,000	1,000
Import Taxes	970,874	1,090,000	1,140,000
3. Other Revenues			
Court Fines, Penalties, Etc.	32,244	40,000	45,000
Unimproved Land Rental	28,747	30,000	35,000
Other Property Rental	76,332	85,000	90,000
Corporation Tax (Mobil)	92,288	45,000	45,000
Other Licenses and Permits	11,415	10,000	10,000
Miscellaneous	7,334	10,000	20,000
Total	$4,644,317*	$5,016,000*	$5,346,000

* Excludes $125,000 of U.S. Grants Funds appropriated for support of the operations of the Congress of Micronesia.

MICRONESIAN CLAIMS FUND

Appropriation, 1973..... -0-

Appropriation, 1974..... -0-

Budget estimate, 1975.....$1,400,000

Analysis by Activity

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
War Claims:				
Title I				
Unobligated balance, start of year	$-5,000,000	$-4,999,000	$-3,500,000	$+3,500,000
Current year obligations	1,000	1,499,000	3,500,000	-3,500,000
Unobligated balance, end of year	4,999,000	3,500,000	---	---
Appropriation	---	---	---	---
Title II				
Appropriation request-obligations	---	---	1,400,000	+1,400,000
Total Appropriation	---	---	1,400,000	+1,400,000

JUSTIFICATION

War Claims: Fiscal year 1974, -0-; fiscal year 1975, $1,400,000, increase, $1,400,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$+1,400,000	--	$1,400,000	--	Initiate settlement of Title II claims pursuant to Public Law 92-39.

Public Law 92-39 provides ex gratia payments to certain inhabitants of the Trust Territory of the Pacific Islands who suffered damages arising out of the hostilities of the Second World War and prior to July 1, 1951, and to establish a Micronesian Claims Commission. Title I of the Act essentially provides $5,000,000 for war claims matching an equal payment in kind by the Government of Japan. Title II provides $20,000,000 for Post Secure claims to personal or real property that arose prior to July 1, 1951.

Title I monies have already been paid into a "Micronesian Claims Fund" and claims are now being adjudicated and paid. The $1,400,000 fiscal year 1975 request represents the first portion of Title II monies needed to settle Post Secure claims. The Micronesian Claims Commission estimates it will adjudicate 300 Title II cases in fiscal year 1975. Payment will initially be made on a 50% pro-rata basis since the aggregate amount of Title II awards may exceed the $20,000,000 authorization. Those persons determined to have been injured will be expecting their compensation. Prompt payment will reflect well on the United States, whereas delay could adversely affect the current political status negotiations with the people of the Mariana Islands and in the remainder of the Trust Territory of the Pacific Islands.

ITEMIZATION OF ESTIMATE

	F.Y. 1973 Actual	F.Y. 1974 Estimate	F.Y. 1975 Estimate	Increase (+) Decrease (-)
Program and Financing:				
Total obligations.....	$ 1,000	$1,499,000	$4,900,000	$+3,401,000
Unobligated balance, start of year.....	-5,000,000	-4,999,000	-3,500,000	-1,499,000
Unobligated balance, end of year.....	4,999,000	3,500,000	---	-3,500,000
Budget Authority (Appropriation)...	---	---	1,400,000	1,400,000
Object Classification:				
42 Insurance claims and indemnities.....	1,000	1,499,000	4,900,000	+3,401,000

DEPARTMENT OF THE INTERIOR

Office of the Solicitor

Legal Services: Fiscal year 1974, $9,072,388; fiscal year 1975, $11,520,000; increase $2,447,612. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+108,000	---	$415,000	21	Annualization of supplemental appropriation for Mine Health and Safety
(2)	+608,000	---	1,300,000	60	Annualization of supplemental appropriation for Energy functions
(3)	+167,000	---	11,520,000	472	Annualization of pay cost supplemental for October pay raise
(4)	+329,512	16	11,520,000	472	General increase in legal services provided
(5)	+221,000	---	486,000	472	Funding to increase legal services through increased travel
(6)	+119,900	5	119,900	5	Five positions for BIA Trust responsibilities work
(7)	+ 41,200	---	11,520,000	472	Contracting of patent work
(8)	+112,000	---	11,520,000	472	Establishment of Word Processing Center in Wash.,D.C.
(9)	+ 60,000	---	11,520,000	472	Completion of law libraries in field offices
(10)	+681,000	---	11,520,000	472	To reimburse GSA for rental of space costs
	+2,447,612	21			

Cost Factors Involved in Increases

(1) Annualization of fiscal year 1974 supplemental appropriation for Mine Health and Safety, $108,000.

(2) Annualization of fiscal year 1974 supplemental appropriation for Energy, $608,000.

(3) Annualization of pay cost supplemental covering the October 1973 pay raise, $167,000.

(4) General increase in legal services to adequately staff existing programs; provides funds for 16 positions, 12 attorneys and 4 secretaries, $329,512.

(5) Funding to increase legal services provided through increased travel, $221,000, covering general legal support, training, office administration, and personnel relocation.

(6) Five positions, 3 attorney and 2 clerical support, for BIA Trust responsibilities work, $119,900.

(7) $41,200 to contract out 52 patent cases, at an average cost per case of $800, in order to reduce the backlog of cases in this area.

(8) $112,000 to establish a Word Processing Center in Washington, D.C., providing magnetic card typewriters and dictation and transcribing equipment.

(9) To complete the law libraries in the 8 Regions of the Solicitor's Office, $60,000.

(10) Funds requested to reimburse General Services Administration for space costs, $681,000.

Note: It should be noted at this time that of our $11,520,000 request for fiscal year 1975, $1,300,000 is for legal services for the new Federal Energy Administration pending its formal establishment by Congress. Upon establishment of this agency, our budget will be decreased by appropriation transfer in the amount of $1,300,000.

Appropriation 1973	$7,000,000		
Supplemental appropriation, 1973	360,000		
Total appropriation, 1973		7,360,000	
Transferred to General Services Administration for rent		-9,002	
Total available, 1973		7,350,998	
Appropriation 1974	7,500,000		
Supplemental appropriation, 1974 (Mine Health & Safety and Energy)	999,000		
Pay cost supplemental (January and October pay raises)	595,000		
Total appropriation, 1974		9,094,000	
Transferred to General Services Administration for rent		-21,612	
Total available, 1974		9,072,388	

Summary of Increases and Decreases, 1975

	Base for 1975	Increase 1975	
Legal Services:			
Annualization of supplemental appropriation for Mine Health & Safety	307,000	108,000	
Annualization of supplemental appropriation for Energy	692,000	608,000	
Annualization of pay cost supplemental (October pay raise)	230,000	167,000	
General increase in legal services	---	329,512	
Increased legal services through increased travel	270,000	221,000	
BIA Trust responsibilities work	---	119,900	
Contracting patent work	---	41,200	
Establishing Word Processing Center in Washington, D.C.	---	112,000	
Completion of field office law libraries	---	60,000	
Space User Charge	---	681,000	+2,447,612
Net Increase, 1975			+2,447,612
Budget Estimate, 1975			11,520,000

Analysis by Activity

Activity	Fiscal Year 1973 Amount Available	Fiscal Year 1974 Total Appropriation	Pay Cost Supplemental	1/ Transfers	Amount Available
Legal Services	$7,245,919	$8,499,000	$595,000	$-21,612	$9,072,388
Unobligated balance lapsing	105,079	---	---	---	---
Total	7,350,998	8,499,000	595,000	-21,612	9,072,388

1/ Transfer to General Services Administration for rent.

Activity	Fiscal Year 1973 Amount Available	Fiscal Year 1974 Amount Available	Fiscal Year 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
Legal Services	$7,245,919	$9,072,388	$11,520,000	$+2,447,612
Unobligated balance lapsing	105,079	---	---	---
Total	7,350,998	9,072,388	11,520,000	+2,447,612

I. INTRODUCTION

The Office of the Solicitor of the Department of the Interior is today incapable of doing the job which this Administration, the Secretary of the Interior and the bureaus and agencies of this Department require. Because of our present personnel and budgetary limitations, we are constrained to defer and even neglect matters that are vitally important to our clients in order to meet the need for legal services in connection with only selected, high-priority problems.

The simple hard fact is that the Solicitor's Office requires substantially increased funding if it is to do its job. It is, therefore, in that context that we have prepared and submitted this budget to the Congress. It provides for an increase of $2,447,612. This budget will be adequate only if no new programs are adopted by Congress and if no major new allocations of funds are made for existing programs.

II. ANNUALIZED SUPPLEMENTALS

The first three items of increase are sums necessary to bring the base appropriation to a full-year level of funding. One hundred and eight thousand dollars ($108,000) is necessary to annualize the FY 1974 supplemental appropriation for Mine Health and Safety; $608,000 is necessary to annualize the FY 1974 supplemental appropriation for Energy; $167,000 is necessary to annualize the supplemental appropriation provided for the October 1973 pay raise. It is absolutely essential that these sums be granted, as they cannot be absorbed.

III. GENERAL INCREASE IN LEGAL SERVICES

The workload of this office relating to existing programs has increased substantially because: (1) those dealing with the Department and those affected by its actions are taking their grievances to court with unprecedented frequency; (2) the Department's approach to matters within its jurisdiction is far more sophisticated than in past years requiring more sophisticated -- and time consuming -- legal work; and (3) the problems faced by the Department are more complex. Many of our systems and procedures are antiquated, with the result that our lawyers spend an inordinate amount of time on problems. Proper technical assistance would both free lawyers to spend more time on clients' problems and would enable them to do a better job on those problems.

It is a fact of life in this decade that persons look to the courts for relief from agency decisions, policies and practices. In many cases, the agency does not have a chance to resolve the problem informally, but rather must defend litigation. In addition, the courts have greatly facilitated litigation by special interest groups. No longer are we able to have law suits dismissed as unconsented suits against the United States, plead sovereign immunity or successfully allege lack of standing to sue. Increasingly, the courts are becoming the ultimate arbiter of the regulations, programs and decisions of the Department.

The litigation over the adequacy of environmental impact statements is a classic example of this problem. The increase has been geometric, because NEPA provides an excellent vehicle for special interest groups -- environmental, business and other -- to totally frustrate and block for substantial periods of time an agency decision. Witness the Trans-Alaska Pipeline and the helium contract termination litigation. The problem is further complicated by the fact that we do not have the

staff to assist the agencies in preparing impact statements, except to a very limited extent. This increases Interior's exposure to expensive litigation.

Furthermore, society is becoming more complex and the laws which Congress enacts to resolve these problems must, of necessity, be complex. No longer is the Solicitor's Office interpreting a simple mining law or authorization to issue regulations. In almost all of the program areas of this Department, the solutions suggested are technically and legally complex. We need lawyers to handle the legal complexities, to counsel the bureaus and offices about difficult legislation and problems, and to draft the complex documents necessary for complex situations.

In addition, there are the relationships with Congress. Congress carefully scrutinizes the programs and actions of this Department, asking many difficult legal questions. The future will hold only more Congressional inquiries into the activities of this Department. To respond timely, effectively and responsibly requires lawyers who are available to perform the required work.

Finally, the Solicitor's Office does not now have the staff capacity to practice preventive law -- that is, to engage in the practice of law which minimizes litigation and legal controversy before they arise, which smooths the implementation of Department programs and the taking of specific actions within those programs. We historically deal in crises. In many instances, the net result is frustration and delay of the Department's programs. One of the causes of this situation is that the Solicitor's Office does not have the staff capacity to work directly with the bureaus and offices to help structure programs and decisions and to prepare regulations and legal documents that are legally defensible and sufficiently sophisticated and comprehensive to accomplish Departmental objectives to protect the legitimate interests of the Department and the Administration, and to avoid as much as possible future dispute.

If we are truly to act as counselor at law, we must be available to be a participant in agency decisions. The fact that litigation is the way of doing business with the Federal Government, resulting in numerous court decisions, places additional burdens on our office to have the capability to stay current with new court decisions and to make educated predictions of future changes in "judge made" law. These predictions should not be made, as they frequently are now, as seat-of-the-pants guesses. Rather, they should be based on research, which presupposes an adequate staff, adequate equipment, and the ability to take the time to make a professional judgment based on all available facts and law.

The Solicitor's Office is requesting an increase of $329,512 funding for 16 new positions, to meet the generally increased legal service needs of the Department in Washington and the field in FY 1975. It is impossible for this office to predict exactly which field office or which Washington division will have the most urgent need for additional attorneys at that time. Until major litigation is filed or a major preventive law problem arises, we cannot tell whether it is best handled in Washington or one of our regional field offices. This, coupled with rapidly occurring developments in a number of areas of the Department's responsibility, is the reason it is impossible to predict with certainty which office or which division will require additional lawyers. We can predict, however, that the office will need additional attorneys, but we must maintain the flexibility to be responsive to the particular need where and when it occurs.

Washington

A. The current energy and materials crisis is of such scope and magnitude that the Department of the Interior, and therefore the Office of the Solicitor, will continue to have a heavy workload in such matters. The public domain lands administered by Interior contain vast deposits of energy-producing materials such as fossil fuels, oil and gas, and oil shale which can be developed or production expanded to alleviate existing shortages. Accelerated development of these resources will greatly increase the workload of the Solicitor's Office in the near future. In addition, the development of new energy sources such as coal gasification and solar energy and geothermal steam will undoubtedly result in increased activities upon the public domain and an increased legal workload. Under current plans, none of this activity relating to Federal lands is to be administered by the Federal Energy Administration.

Work in the field of power is increasing due to involvement directly and as counsel for the Defense Electric Power Administration in regional or national power shortages, such as the currently worsening crisis in the Pacific Northwest; enactment of legislation authorizing the Bonneville Power Administration to participate in a revised and expanded Pacific Northwest hydrothermal power program; involvement in the environmental and technical aspects of power generation and transmission activities on the public lands, such as our extensive involvement in the contracts relating to the Navajo powerplant and in right-of-way regulations; expanded geothermal power development; involvement of Interior power marketing agencies in regional power pools such as the Mid-Continent Area Power Pool Agreement.

If the proposed Federal Energy Administration is created and the four offices of Interior (Offices of Oil and Gas, Petroleum Allocation, Energy Conservation and Energy Data and Analysis) are transferred to it, the workload of the Solicitor's Office will not be diminished thereby. Legal support for the Office of Petroleum Allocation by the Solicitor's Office lawyers is being accomplished by the temporary detail of lawyers from other program areas, and what remains of this work is rapidly being taken over by lawyers detailed from other agencies to the Federal Energy Office. The other three offices presently have minimal requirements for legal services.

B. Impact of Future Natural Resource Development in Alaska

The past two years have definitely established that the newly organized conservation community will vigorously resist the opening of every undeveloped area in Alaska that remains in Federal ownership.

At present, all twelve Alaska native regional corporations are busily studying and selecting lands for the natural resources which they contain and which these regional corporations hope to develop immediately after acquisition of title. These developmental pressures will compel the Department to provide surface corridors through which oil, gas, coal, phospate, asbestos, copper ore, lead, zinc, iron and other metals and high-voltage electricity must be transported to market by pipeline, road, rail, barge and high-voltage transmission lines. The present transportation and utility corridor from the Beaufort Sea to Prince William Sound may carry several oil and gas pipelines, and other corridors have been proposed for such lines. The already identified oil fields to the east and west of Prudhoe Bay make it obvious that even other corridors to different destinations may be needed within the next two to three years. Within the next five years,

the Department will actually have to face the possibility of deepwater port construction. Each of these corridors and each of these pipelines will be projects on the ground equal to the present transportation and utility corridors and the Trans-Alaska Pipeline. While the work done on the original corridor and pipeline will probably prove to be basic prototypes of the additional projects, each new corridor and the initial developments in that corridor will require environmental impact statements and other actions requiring legal services of a magnitude equal to or greater than those performed to date for the Trans-Alaska Pipeline.

The present and future corridors will open new areas of interior Alaska to intensive use and development. Every environmental impact statement, every new corridor, every pipeline, road, railroad, water shipment facility and electric transmission line has its own peculiar legal problem. Every land classification action and conveyance to private ownership and accommodation to these developments has its own legal problem. The completion of the Trans-Alaska Pipeline and the transfer of some 50 million acres into private ownership through the Alaska Native Claims Settlement Act are expected to bring about a major economic boom in Alaska. The area in public lands being opened to this forthcoming development in Alaska is half the size of all the public lands in the lower 48 States. Every bureau in the Department of the Interior and every division in the Office of the Solicitor will need to gear up in advance if this Department is to carry out its responsibilities within a reasonable period of time.

Because the effected values are known to exceed a trillion dollars, the Department cannot possibly resist the pressures for speedy and appropriate action.

C. The Department of the Interior will increasingly be involved in international legal matters in the execution of national policy to accelerate production of marine mineral resources, in more stringent protection of the ocean environment from pollution, and in the determination of both national and international maritime boundaries. At present, development of vast petroleum reserves lying beneath the outer continental shelf of the United States is being expanded tremendously, with international implications, as the 200-meter depth is reached. The extent of Federal jurisdiction over the area is in dispute.

D. Activities by activist Indian tribes and groups have had and will continue to have increasing and significant impact on the Solicitor's Office workload, as increased legal support is necessary for all of the increased activities now being demanded of the BIA.

E. Work will continue to increase in the area of environment, due to the need to conform the various bills pending before Congress to the requirements of the National Environmental Policy Act, in particular the Mined Area Protection Act, the Land Use Policy and Planning Assistance Act, the Mineral Resources Lands Management Act, the Electric Facility Siting Act and the Mineral Leasing Act. In addition, problems are arising in connection with the Federal Water Quality Act Amendments and the Clean Air Act. All of this will result in an increased obligation to examine all bureau activities for legal compliance.

A considerable amount of legal work has already been devoted to analyzing the various proposals and preliminarily determining the probable nature and timing of the actions necessary to comply with NEPA. The preliminary planning and analysis work will continue to

increase as the bills near passage, at which time the workload will escalate drastically as the business of actual EIS preparation begins. (It should be noted that workload increases resulting from the passage of such legislation are not the subject of this request.)

The foregoing are cited as examples of increased activities of the Interior Department -- within existing programs and legislation -- that will occur during FY 1975. These demands on the Department require extensive legal services from the Solicitor's Office.

Additional staff to handle these Washington workload increases and to fully support existing demands is as follows:

1	Attorney, GS-14	$ 24,247
4	Attorneys, GS-13	82,708
2	Attorneys, GS-12	34,994
2	Secretaries, GS-6	17,954
	Salaries	$ 159,903
	Benefits	$ 14,373
	Other expenses: supplies, books, equipment, services, etc.	$ 15,810
	Total, D.C.	$ 190,086

Field

A. The BIA legal demands increase has equal impact on our field offices as in Washington.

B. EEOC contract compliance work is creating a mushrooming workload in our Denver Regional office as that city has been selected as the western center for all EEOC activity.

C. Concentration of the NPS effort to clear old mining claims dating prior to park establishment is being done through our San Francisco office and not only makes up in workload what was lost by the NPS move to Denver but results in a total gain in workload both in San Francisco and in Denver where the Western Service Center is now located.

D. The New England area has never received significant attention from Interior. Now, with new activity in that area on the part of the Bureau of Outdoor Recreation and the National Park Service, the Solicitor's Office will be requested to provide all necessary legal services.

E. With Interior's role having crossed east of the Mississippi, we have similarly experienced an increase in the activities in the southeast United States. We have established a new regional office in Atlanta, Georgia, in response to this increase, and anticipate further growth, resulting from increased title opinion work and our decision to handle Mine Health and Safety hearings for the Southern States from Atlanta.

F. We received funding in FY 1974 for attorneys to handle the Labor-Management Relations cases. The increase of work in this

area has exceeded our estimates and will demand more than the two attorneys added in FY 1974.

G. The Alaskan development problems mentioned earlier will tremendously increase the workload of the Anchorage Regional Office as well as Washington's.

Additional staff to handle these field workload increases is as follows:

1	Attorney, GS-14	$ 24,247
2	Attorneys, GS-13	41,354
2	Attorneys, GS-12	34,994
2	Secretaries, GS-5	16,110
	7 Salaries	$ 116,705
	Benefits	$ 10,501
	Other expenses: supplies, books, equipment, services, etc.	$ 12,220
	Total, Field	$ 139,426

The Solicitor's Office is a service organization. The quality of the service is a function of the number and ability of lawyers. We have the talent, but we need more of it. Accordingly, we are requesting twelve additional lawyers and four additional clerical support positions to accomodate this general increased need for our services, at a cost of $329,512.

IV. TRAVEL FUNDS

When the reorganization of the Solicitor's Office took place in 1954, the Interior agencies and bureaus were assured that the legal assistance they need and require would not be diminished because they no longer would have legal staffs of their own. On the contrary, the supposition was that legal assistance would be strengthened due to the more efficient utilization of specialized skills. This concept has proved to be sound and has at the same time probably reduced the overall cost of providing legal service throughout the Department. However, a definite shortcoming is the inability of the legal staff to participate fully in the areas of its responsibility; this is to a large extent due to the restricted travel budget. This is particularly regrettable when a comparatively small increase in travel funds would alleviate the problem.

The ability to have a qualified attorney present at the time and place his services are required is perhaps the greatest single asset the consolidation of legal services offers to our client agencies, and travel funds have become the greatest stumbling block to fulfilling this mission of providing legal services.

The Solicitor's Office appropriation includes funds for travel, of which $174,000 was expended in FY 1973. Beyond this, however, various client bureaus and agencies paid $41,003 in FY 1973 for travel performed by Solicitor's attorneys. We believe that the practice of depending on bureaus to pay our attorneys' travel expenses should cease, and the Solicitor's budget first should be increased by the amount of bureau travel payments, thus equipping the Solicitor's

Office to carry out its mission dependent only upon its own appropriated funds. Moreover, a substantial increment should be included to significantly expand the travel performed by the Solicitor's Office, as constraints of tight internal travel allowance and reluctant bureau travel payment have created a practice where necessary travel is prohibited by this funding situation.

Further, notwithstanding the additional travel money from the bureaus, the Solicitor's Office has been precluded in many instances from rendering adequate legal service because of a lack of travel funds. The total increase necessary to remedy this deficiency in travel in FY 1975 is $221,000, which includes assumption of Bureau travel, $41,000. Additional travel is included in the request for funds for legal services for BIA trust responsibilities. This travel is discussed in the context of that program and is not included in the $221,000 request.

The problems resulting from dependence upon bureau payment of travel are myriad. Bureaus have been paying for administrative travel, which has actually consisted of trips related to legal problems, including trips to assist administrators in negotiating contracts, reviewing contract claims, and negotiating with contractors in respect thereto; attendance at negotiating conferences involving the Equal Employment Opportunity Program; investigation of tort claims; and preparation for hearings and trials in many instances. Solicitor's funds have permitted only limited travel, primarily confined to mandatory attendance at hearings (contract appeals, grazing appeals, mining contests, coal mine health and safety proceedings, trials in U.S. District courts, etc.). In addition, a few selected trips for other purposes have been paid for out of Solicitor's funds where their purpose was clearly related to the legal mission of the Department or internal operations of the Solicitor's Office (travel to D.C. Solicitor's Office, or travel to field offices for periodic supervision visits, etc.).

The practice of traveling on agency funds is often times controversial. It has posed significant questions by administrators as to why the Solicitor's Office is not equipped with sufficient funds to properly carry out its mission. Therefore, in addition to hampering the carrying out of the office mission, it has tended to promote extraneous and sometimes contentious discussions with agency clients that have unnecessarily strained relationships in some cases. Our dependency upon the bureaus, which hampers our relationships with them, nevertheless is a fact. An example of this dependency: in recent years there have been many instances where Regional Office clients needed legal assistance in other parts of the country. When members of Regional Solicitor's staffs have been asked to attend meetings at these other sites, they often have had to respond that they could go only in an administrative capacity, subject to bureau payment of travel expenses. Dependency upon the client's willingness or ability to pay should not exist in a government legal office, where legal services should be fully provided to all clients, regardless of their financial input.

An increase in travel funds would allow the Solicitor's Office to avoid dependency upon bureaus, and more importantly, to better carry out our responsibilities.

The overly restrictive travel budget has had a substantial inhibiting effect upon all proposed travel. This has resulted in many necessary trips being cancelled or postponed because the physical presence of a lawyer would not be categorized as "essential", e.g., at a hearing before an Administrative Law Judge, and many important trips are not even proposed for the same reasons. Use of memoranda and telephones is not necessarily the most efficient means available to lawyers for the resolution of legal matters, although where they are the most appropriate, they have and will continue to be used. Travel to

the site might often be the most effective and long-term efficient means of handling a case. All too often, however, our lawyers are forced to choose the memo and telephone route, not because it is the best method but because it is the cheapest.

It is our view that the operations of the Solicitor's Office are most efficiently and satisfactorily carried out in the posture of advice and consideration on an informal basis. While the issuance of formal legal opinions is a very significant and important function of the office, nonetheless dealing with the legal problems in an agency's programs on an informal basis and approval of administrative actions through means other than issuance of formal opinions is generally a much more efficient, effective and worthwhile policy. We have found, for example, that communication by a memorandum between client and attorney and attorney and client is inefficient and sometimes ineffective. Very rarely can the client succinctly state all of the salient facts and properly pose his problem in written form. Frequently, the nature and extent of legal issues to be resolved by a lawyer can be determined only by a meeting between the lawyer and client.

Legal advice rendered in written form also tends, at times, to give insufficient consideration to the necessary and proper practical considerations and results and, as a consequence, tends to overemphasize the purely legal implications of a situation. The trespass-access problems we had occasion to consider recently at Grand Teton Park are specific examples of what we are talking about. Questions as to these matters were posed to this office in writing some months ago and formal legal opinions were rendered in response thereto. These opinions were legally correct based upon the facts stated in the incoming communications from NPS. While these opinions were proper, they did not solve the immediate problem of the administrator which involved not only the legal rights of the Government but also how to deal with what this office had advised was an improper use of the land by the user. In face-to-face discussions at the site between attorneys from this office and administrators, we not only became fully familiar with the facts on the ground (which confirmed the basic conclusions of the previously given written legal advice), but we also were able to consider in depth the matter of further action to accomplish the end objectives of the administrator. As a result, an agreement was reached as to his course of action which will hopefully result in a negotiated solution between the Government and the user of the access. This kind of effort is simply not possible without traveling to the site and having in-depth discussion with administrative personnel. Results obtained in this manner could not have been effected through an exchange of correspondence.

A. General Support Increase

The following sections provide examples of how the availability of travel funds would benefit the Department, improve the service of the Solicitor's Office and, in fact, result in cost savings to the Government.

1. Contract Negotiations

In the area of negotiations, it has been generally necessary to travel on agency funds when traveling has been done. We are of the view that we could render a much improved service to our client agencies if we could make ourselves available for out-of-town negotiation sessions in a wider variety of instances. In addition to traveling to more contract negotiations (e.g., repayment, water service, and power contracts of the Bureau of Reclamation) and negotiations on contract claims, mineral leasing, Bureau of Indian Affairs and National Park Service matters, etc.,

we believe that there will be increased emphasis in the future on negotiation to obtain compliance in the Equal Employment Opportunity field which will involve travel that the Solicitor's Office should fund.

2. Water Rights

In the field of water rights we are involved in an extensive program of the presentation of agency water claims for adjudication in the State courts pursuant to the provisions of the so-called McCarren Amendment (43 U.S.C. Sec. 666). In most instances to date we have been unable to give the type of in-depth requested assistance to Justice Department personnel because we have not had funds to allow travel to the hearings on important water right application matters at various locations away from our headquarters cities in the States we serve.

3. Support for the Assistant Secretary for Fish, Wildlife and Parks

Additional travel funds are required to provide attorneys to represent the Assistant Secretary for Fish and Wildlife and Parks at administrative hearings on the assessment of civil penalties for violations of Marine Mammal, Endangered Species, and Lacey Acts, which relate to the illegal taking or transportation of fish and wildlife. Since it is the Department policy to hold these hearings in the metropolitan area nearest the defendant, extensive travel is required by regional and Washington lawyers. Absent travel funds, attorneys cannot prepare for hearings by interviewing witnesses, taking depositions, and preparing evidence. The net result from inadequate funding is that many cases may be unnecessarily settled to the disadvantage of the Government or not tried at all -- all because lack of travel funds precludes development of an adequate case.

Although we have made extensive efforts to direct hearing work to the field lawyers, travel is still necessary to properly represent the Department in these significant and controversial proceedings. The funding issue is further compounded by the fact that the number of hearings accelerated from FY 1974 level of approximately 50 to a predicted FY 1975 level of 200. We need travel funds to not only catch up, but also to stay with the growth of this program.

The Solicitor's Office is constantly called upon to travel on behalf of the Assistant Secretary, Fish, Wildlife and Parks, National Park Service, Bureau of Sport Fisheries and Wildlife and the Bureau of Outdoor Recreation to provide legal guidance on complicated legal and policy problems which are being handled in the Washington Office. In the past, we have traveled almost exclusively on agency funds. This has resulted in this office being able to provide legal services only when deemed "appropriate" by the agency. In most instances, this results only in a "fire fighting" practice of law, rather than a practice of law which is designed to prevent legal problems and unnecessary litigation. This latter objective can be realized in many instances by having funds available for the attorneys to travel directly to an area where problems have arisen to discuss the matter with opposing attorneys and review the problem firsthand. In addition, by having travel funds available in the Solicitor's Office, the agencies will not be able to pick and choose those problems in which they believe lawyers are required. Too often agency staffs practice law and systematically exclude attorneys until the problems reach

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the crisis stage. Additional travel funds would have an impact on this problem.

An example of situations where the attorney travel is critical would be problems relating to the water supply at the Everglades National Park, drainage and construction activities at Big Cypress Swamp, and land acquisition at Redwood National Park. Other examples include the examination of the land uses to assure compliance of deed restrictions for properties conveyed under the legacy of park programs, appearances before AEC and FPC regarding the licenses of reactors and dams which will adversely affect program areas of this Department (Turkey Point Power Plant, LaSalle Plant).

The law enforcement emergency work performed throughout the National Park System by the United States Park Police should receive significant attention from the Solicitor's Office. The Park Police are increasingly being called upon to provide law enforcement emergency assistance throughout the United States. Recent examples include three trips to Mt. Rushmore to deal with Indian demonstrations connected with the Wounded Knee takeover, a trip to Rocky Mountain National Park to deal with motorcycle gang problems, and trips to Delaware Water Gap to deal with a trespass problem.

These law enforcement emergencies carry serious potential for disruption and possible violence. Invariably, the officers are faced with complicated jurisdictional and scope of authority legal problems in addition to the usual problems of proper charge and arrest procedures. Also, it is not uncommon for a demonstration group to be represented by counsel which considerably handicaps the police officers.

It is often impossible for Solicitor's Office personnel to accurately gauge the extent of a law enforcement problem and to render effective advice by telephone. It is felt that, by having an attorney accompany police officers to the scene of a law enforcement emergency, appropriate advice can be given resulting in proper police tactics and effective prosecution. Providing these vital legal services is severely handicapped by lack of travel funds.

The Solicitor's Office has had difficulty in advising the Park Service in the drafting of appropriate rules and regulations for visitor use of areas in the Park System. We have discovered after 10 years of experience that these matters cannot be resolved exclusively on the telephone or by memoranda. We have discovered, however, that the drafting of regulations <u>can</u> be resolved by sitting down with the Park personnel involved, discussing the problem, and drafting the regulations in the Park Service field office. Such a procedure requires travel funds, but would cut the time for the adoption and publication of regulations from four months to one month.

4. Energy and Natural Resources

The increasing workload we have described in Section II, "General increase in legal service," in the areas of natural resource development of Alaska, international legal matters, energy and materials crisis, and the power crisis will necessitate a corresponding increase in travel.

The demands for travel experienced by the regional offices are examples of the need for across-the-board travel increases for on-going programs. The State Directors of BLM have jurisdiction over many district offices in each State, some of which have in excess

6. Mine Health and Safety

The field of coal mine health and safety illustrates great need for travel funds. Only rarely have we been able to afford sending trial attorneys to the site of disputes as a part of the trial preparation effort. Greater travel would have many advantages to the Government from financial and other aspects. First, we are firmly convinced that trial attorneys will do a much improved job of presenting the Government's case in litigation if they are able to view the site of the dispute because the attorneys will then have a much better perspective of the matter at hand. All attorneys feel that a case is transformed from an abstract matter into a living and breathing concept by a site visit. Second, we are convinced that this practice will result in a lower overall expenditure for the Government because we believe that trial preparation time can be cut significantly, (up to as much as one-third in some instances). Third, sending one or two lawyers to the field often obviates the necessity for the agency client to dispatch several potential witnesses to the office of the trial attorney for interview and later for trial preparation. Fourth, we are convinced that site visits enhance the confidence level of the trial attorney and thus reduce the amount of time that he feels he should spend in office trial preparation.

Specifically, the trial attorney is often required to travel to the mine with the Federal inspector or engineer to prepare for the case. In these cases the best interests of the Government would be served in that both time and expense will be conserved by obtaining a more complete understanding of the situation in the optimum amount of time. In conjunction with this preparation, the attorney must sometimes travel out of the city for the purpose of taking depositions.

Travel demands have increased tremendously for the purpose of trying coal mine health and safety cases, inasmuch as the Law Judges tend to set the cases near the mines in most instances. Of course, travel to view the area would not be done in all cases but only in those instances where a significant advantage was involved (e.g., major mining contests or contract appeals). We have made an effort to reduce required travel for these Mine Health and Safety cases by increasing the staff in the Atlanta office and assigning hearings in the southern States to the Atlanta Region. However, it is not possible to arrange all hearings convenient to Regional Offices.

A specific demand for travel is related to the amendment to Solicitor Regulation 31, authorizing the Regional Solicitor to handle and compromise coal mine health and safety penalty cases. Travel will be required, in certain instances, to meet with counsel for operators out of town for the purpose of settlement discussions under this program. At the Mineral Law Institute held in Snowmass, Colorado, recently, after the daily sessions were completed, a member of the Denver Regional Solicitor's staff discussed settlement of coal mine health and safety cases with an attorney for an operator. Two cases were settled and discussions were continued on the third for the purpose of gathering additional facts looking toward a compromise settlement. Since that time, the opportunity to discuss the third case in Glenwood Springs arose. Fortunately, the operator and his attorney had prescheduled a trip to Denver on other business. The final settlement discussion was held during that period of time. Such fortuitous coincidences will not always be the case, however, and it should not be expected in all instances that the Government will be able to have the operator and his attorney come to the appropriate Solicitor's Office location.

of 100 employees. The District Manager of these offices must deal constantly with problems arising from numerous timber sale contracts, reciprocal right-of-way and road use agreements, as well as many different types of applications for permits, entries, leases, and patents. They are also concerned with problems involving water rights, mining claims, wild horse protection, pollution control, and timber, fire, agriculture, grazing and occupancy trespasses. An occasional visit to the larger District Managers' offices by an attorney from the Solicitor's Office would make it possible to discuss many of these problems at an early stage and avoid future complications. This again is a type of preventative law practice that we have not been able to provide in recent years because of lack of travel funds.

Providing legal services to Interior's power administrations illustrates another area where greater ability to travel is necessary. The Bonneville Power Administration, with headquarters in Portland, Oregon, is essentially a public utility having the responsibility to sell and transmit power from Federal, public, and private power generating facilities over a transmission grid of approximately 12,000 miles. The Administration has power sales contracts, exchange, trust, and related agreements with private and public utilities, and large industrial plants, extending from British Columbia in the north to San Diego in the south. BPA is deeply involved in assisting private and public power companies with obtaining financing of new thermal power plants. The Portland Regional Solicitor's Office has a major role in this program which involves intensive negotiations with New York financial institutions and their bond counsel. Travel costs in this connection are exceptionally heavy. The Bonneville Power Administrator, like many bureau officials, operates on the premise that highly competent legal advice should be available to him where and as he needs it. We believe his position is well taken. It is necessary, therefore, for this office to be in a position to commit itself to full participation in the programs of the bureaus, including attendance at regional meetings involving representatives of public and private interests, independent contracting and engineering organizations, and large industrial and business firms.

5. Patents

The Patent law work in Washington should have a significant increase in travel. The Department has over 12,000 scientists and engineers who are potential inventors, yet only a little over 100 invention disclosures are reported yearly. It is felt that one reason for this is that there has been no real program to educate the potential inventors as to their obligations to report inventions. On those relatively few occasions when a patent attorney has gone to a Bureau field office, he has been inundated with requests for advice, questions, etc., about the patent system in the Department -- which is very important to many of those Bureau people. More travel by patent attorneys would be of obvious benefit.

A second reason for patent attorney travel is that many times it is necessary to discuss patent prosecution with the inventors. Telephoning is inadequate. As it now stands, to meet with the inventor, we must wait until the inventor comes to Washington. This should not be. Patent prosecution is a complicated legal undertaking and should not be made more difficult by the denial of personal access by the lawyers to the inventors.

7. Indian Affairs

In the field of Indian affairs, the effective performance of our responsibilities requires more frequent personal contact in the field than we have been able to provide -- contact not only with field personnel of BIA, but also with the tribes and their leaders and attendance at their meetings. Direct on-the-ground discussions with the Indian people, availability for direct response to their questions, visible indication of a direct interest in their problems, and a better understanding of those problems can be gained only from such on-the-scene contacts. Frequently, we have not been able to attend meetings of Indians, meetings between Indians and State agencies or discussions between State and Federal agency staffs where our presence would have helped bring about an earlier resolution of differences, and where our professional skills of analysis and negotiation and expression could have been extremely helpful.

The Bureau of Indian Affairs maintains twelve area headquarters offices and 77 agency offices throughout the United States, presently serving some 480 Indian reservations, rancherias, and villages widely disbursed from southern Florida to northern Alaska. Not infrequently, the Indian governing bodies find it necessary to send delegations of up to twelve or fifteen people to Washington to consult with the Solicitor's Office on matters of contracts, legislation, land, water rights, tribal affairs, or a myriad of other legal problems between the tribe and the United States. Many of these trips are Federally funded and could be avoided and the problems more efficiently and expeditiously resolved by sending a single attorney to the reservation on meetings with the council.

Although this office receives numerous requests from tribal governments and Indian organizations to attend meetings and conferences in the field, we are able to respond favorably in less than half the cases and most of those have to be justified on an administrative basis in order to support a request that the Bureau of Indian Affairs pay the expenses. The number of conferences at the reservation or agency level made annually by attorneys from this office engaged in Indian legal activities ranges from zero to perhaps six, with most of the attorneys at or near the zero end of the scale. We believe that this office should be funded sufficiently to permit extensive field travel for these reasons:

(1) It would avoid the necessity of tribal delegations, large and small, coming to Washington.

(2) It would provide more complete information and understanding of the legal problems to be resolved.

(3) It would reduce the written workload by providing legal guidance in advance of tribal or Federal action.

(4) It would improve relations with Indians and Indian tribes, as well as with field personnel of the client agency.

Since a considerable portion of the workload in Indian Affairs relates to problems dealing with natural resources owned by the Indian people, firsthand knowledge regarding the resources is invaluable. For example, the magnitude of the timber slash problem on the Quinault Reservation is far better understood after a trip to Queets or Taholah than it can ever be from reports prepared by someone in the field and submitted to Washington. Similarly, the numerous cases involving river

movement and accretion and avulsion along the Colorado River and other major river systems require a basic understanding of the sort of areas involved that cannot be gained from mere review of maps. In a large number of situations, it is precisely because of the remoteness of the area and the problems of access to the area that problems relating to Indian natural resources have gone unsolved. Simply stated, if we are to solve Indian problems, we have to be able to go where the problems are, whether it be a small reservation near the Canadian border in Minnesota, a gigantic reservation in Arizona or a remote pueblo in New Mexico. All require the availability of travel funds.

8. Tort Claims

The increasing frequency of filing tort claims, especially those arising out of the activities of tourists and visitors at the National Parks, presents another area where increased travel is demanded. In a great many instances, a simple 1- or 2-day field trip to the site of a $50,000 tort claim would substantially reduce the amount of Solicitor's Office and agency expense in such matters.

Bureau personnel require advice in conducting investigations of serious accidents in order that bias is eliminated from the investigation. It has been our experience that when the investigators are properly trained and advised by an attorney, the monies expended for the attorney's travel have saved the Government considerable time and expense.

A claim for $2,000,000 for personal injuries sustained in a swimming accident, where judgment was rendered in favor of the Government, is an excellent example of worthwhile travel expenditure. The favorable judgment was mainly attributable to a favorable witness discovered by a Solicitor's Office claims attorney during a three-day on-site investigation.

The number of tort claims filed has greatly accelerated. In calendar year 1965, 145 claims were presented to the Solicitor's Office in Washington. During the first seven months of calendar year 1973, 255 claims were presented for administrative determination. The number of claims presented to field offices has also shown an increase. Claims involving personal injuries and fatalities frequently ask damages in six and seven figures. A study conducted several years ago shows that a substantial number of tort claims are settled prior to litigation. It is our opinion that if travel funds are available for the proper investigation of serious accidents, settlements will be reached early in meritorious cases and this will eliminate costly litigation expense to the Government. In those cases where compromises cannot be reached, the Government will be better prepared for trial.

9. Funding for General Support Increase Travel

It is impossible to estimate by individual program area, bureau client or office geographic location the number of trips required to fully support all activities. We feel that, at a minimum, we need an increase of $73,400, which would allow an average of two additional trips at $200 each per attorney per year throughout the office, Washington and field. While only two trips per year per attorney will obviously be of minimal impact, we feel that at least it provides some increased support in this regard across the board to all bureaus and clients.

B. Training

In addition to travel done in the performance of legal services, there is a great need for funds enabling the staff to travel for training and conferences. This is in keeping with our commitment to continuing legal education.

While attorneys have a basic competence level in their assigned subject areas requiring no further training, new areas of responsibility that must be assumed such as environmental law, equal employment opportunity, coal mine health and safety, etc., present exceptions where more fundamental training will be required. Attendance at seminars for specialized training or education such as Government contracting courses, environmental seminars and similar workshops designed to provide instant expertise in various fields would give the Office the necessary flexibility to provide legal services in new program areas.

In compliance with the July 2, 1973 letter from OMB to the Department, this Office should be prepared to send its mid-manager attorneys to receive executive development training. As most training of this nature will involve travel, funds must be available for this purpose.

Attendance at conferences whose subject matter is pertinent to Interior's program areas has great value as a continuing legal education tool. These conferences are necessary activities to proper performance of our functions so that we can keep abreast of recent developments and so we can get a general feeling of the climate of opinion in the private sector.

Valuable conferences include meetings of organizations actively engaged in fields in which this Office offers advice such as seminars for nuclear insurance; meetings of computer specialists whose subject matter interrelates with subject matter of this Office; EEI meetings dealing with such areas as inductive interference, corona discharges and safety concepts; land use planning seminars where environmental considerations and land uses are being reviewed in a manner that relates to uses the client agencies make of their land resources; meetings of construction oriented groups; procurement oriented groups; environmentally oriented groups; enforcement and jurisdictionally oriented groups; public contract meetings; and legal employment and civil rights activities.

Attendance at these conferences not only tends to provide broadening of the experience of the attendee but also tends to bring everyone in the particular office up to date on new developments in the areas under discussion. Another advantage of attendance at these conferences is that speaker-participants tend to be private practitioners and thus present the viewpoint of the private sector. Attendance and/or active participation in these events by Solicitor's Office personnel also has the worthwhile effect of tending to increase the dissemination of the Government's viewpoint. A third benefit from attendance at these meetings consists of the opportunity they provide for informal interchange with private practitioners and various other individuals from the private sector who are engaged in various fields of operation.

There is a growing expression on the part of industry, private counsel and lawyers representing other interests that Government attorneys should step out of their so-called "ivory tower" environments and become more involved in such matters. Attendance at subject matter conferences thus can have very worthwhile effects, including better public relations.

In addition to promoting attendance at conferences such as referred to above, it is the desire of the Solicitor and Deputy Solicitor that meetings be held periodically at which Solicitor's Office attorneys with specific expertise may meet with other office attorneys and share their knowledge of a subject area. This would involve sending attorneys from several field offices newly engaged in the particular subject area to a central location to meet for a few days of discussion.

That portion of the travel funds increase attributable to training is as follows:

1. Outside training courses, seminars, conferences:

Approximately ½ of attorney staff(s) take one course, each involving travel, at average travel cost of $200 . . . . . $10,000

2. In-house subject matter conferences to be held in a central location (e.g., Denver) once each year, of 2-3 days duration, with 3 Washington attorneys attending and one attorney from each field office. Discussions to concern specific work areas and share expertise.

Transportation	$4,825	
Per Diem	2,675	
	$7,600	$ 7,600

Total $17,600

C. Office Administration

With a view toward increased inter-office communication, it is the desire of the Solicitor and Deputy Solicitor to visit each Regional and Field office at some time during each year. This would provide an opportunity for the Solicitor and Deputy Solicitor to communicate new policies and directions of the Department to field personnel. Blind management is at best second-rate; actual on-site meetings, observation and supervision are far superior and this communication would produce significant efficiencies of time and effort. It is also desired that travel funds be available to allow the Regional Solicitors to visit Field offices under their supervision more frequently, and to allow the Associate Solicitors in Washington to visit Field offices involved in cases with them. These measures, in addition to more frequent Regional Solicitor meetings, would greatly enhance communication, boosting morale and productivity.

Conferences among Solicitor personnel:

1. Solicitor and Deputy Solicitor visit each field office once each year.

Transportation	$3,590	
Per diem	1,410	
	$5,000	$ 5,000

2. Regional Solicitors visit field offices under their supervision as often as is necessary to supervise.

Transportation	$1,785	
Per diem	715	
	$2,500	$ 2,500

3. Associate Solicitors in Washington visit field offices involved in cases under their jurisdiction. Four of the five Associate Solicitors visiting 30% of field offices.

Transportation	$2,650	
Per diem	1,350	
	$4,000	$ 4,000

4. Meetings once a year attended by Solicitor, Deputy Solicitor, Associate Solicitors, Regional Solicitors, and Administrative Officer, one at central location in field and one in Washington.

Transportation	$2,650	
Per diem	850	
	$3,500	$ 3,500
Total	. . . . .	$15,000

D. Geographic Relocations

The Solicitor's Office historically has been reluctant to transfer personnel to different geographic areas because of the prohibitive cost (average $7,500) a move.

As a result of this reluctance, we have not been able to meet the shifting workloads among our field offices by transferring personnel from the decreased workload site. This, we feel, has left several offices overstaffed around the country and some understaffed. The Deputy Solicitor has been conducting an on-site survey of every office of the Solicitor's Office (many of which have never been visited by an office head). He has some desired plans for helpful transfers and is effecting a number of these this fiscal year. However, it is vital that we have the flexibility to be able to continue this effort as appropriate to workload shifts.

Another important result of insufficient funds for personnel transfers involving geographic relocation is the effect on our current promotion policy. In many cases, a vacancy in the field has been filed by recruiting from outside the office and hiring an attorney from the particular locality without Interior experience. This has been done in order to save relocation costs, but it has also prohibited giving experienced attorneys within the office a chance to broaden their exposure and expertise.

In many cases, the vacant position was given to the senior remaining attorney by default, even though he was not necessarily the best man for the job. Because we cannot afford relocation, we do not advertise these vacancies Office-wide and perhaps transfer a high caliber #2 man from another field office. The result is that attorneys do not generally get a higher level position in the office until all senior men die or retire ahead of him. This policy has a demoralizing effect on bright young attorneys, causing us to lose them and sometimes places a less than best-qualified person in a vacancy, Having sufficient travel funds to allow several workload aligning transfers and vacancy replacement transfers would greatly increase the efficient management of the Office.

E. Travel Funding Summary

Bureau payment absorption	$ 41,000
General support increase	73,400
Training	17,600
Office Administration	15,000
Personnel Relocation	75,000
Total	$ 221,000

V. BIA TRUST RESPONSIBILITIES

The Bureau of Indian Affairs is currently realigning its functions and personnel in a manner which will reflect a significantly stronger emphasis on the trust responsibilities of the United States to Indians and Indian tribes. A major new operating division is now the Office of Trust Responsibilities, which will include the functions of identifying, asserting, and administering the Secretary's responsibilities with respect to land, minerals, water rights, timber, grazing rights, monies and other property held by the United States in trust for individual Indians and Indian tribes. The trust responsibility also includes action relating to the strengthening of tribal government and protection of reservation Indians from excessive assertions of State jurisdiction.

The increased emphasis on enforcement of the Secretary's trust responsibilities began in 1967 at the field level of the Bureau of Indian Affairs with the assistance of the already over-burdened offices of the Regional and Field Solicitors. It was further accelerated in 1971, with the establishment of the Office of Indian Water Rights in the Bureau, which reports directly to the Secretary. Recently, the Bureau has encouraged, through its Tribal Operations Branch, the fuller assertion of tribal power of self government. Appropriation requests for these activities have been increasing by more than 10 percent per year and numerous new positions have been established by original creation, transfer or realignment. While the Office of the Solicitor has done all that was possible within its funding and ceiling allowances, it must be able to do more to keep pace with this work.

As a result of increased Bureau emphasis in this area and with the concomitant recognition by the President and the Secretary of the importance of the trust responsibilities, the legal work directly related to these activities will, without question, increase enormously. Although we have already had a substantial increase in legal work resulting from the activities of the Bureau's Washington office, we are just beginning to feel the impact of the Bureau's field activities of the past few years.

During the past year, we noticed a rather substantial increase in the litigation workload in Indian Affairs, both in Washington and the field. While some of this increase was attributable to a concerted effort to file litigation prior to the statute of limitations deadlines last summer, there is a discernible trend towards a far greater volume of litigation than experienced in the past. A number of factors lead us to this conclusion. First, during the period of time when BIA was inactive, it merely allowed us to catch up with our workload. Now that that work is again coming in from BIA, the backlog is starting to build. Second, the cases coming in involve substantial and often historical problems for the Department, for example, title to the San Carlos Mineral Strip, Quechan lands, the protection of Pyramid Lake. Third, the success we have had in some of this litigation, for example, the settlement offers now coming in regarding Colorado River trespass

cases, has encouraged other tribes to seek to litigate their own claims and historical complaints. Fourth, the BIA has for a number of years maintained a Special Projects Group in Phoenix, Arizona, to work up major land litigation requests in that region. On the whole, this group has done an extremely good job and the results of their work are now being felt as part of our workload.

Furthermore, the BIA's success with this approach has led to establishing special project groups in other areas, for example, the Arkansas Riverbed Group in Oklahoma and the Missouri River Group dealing with Omaha and Winnebago problems of boundaries. The Office of Indian Water Rights currently has water resource inventories under way on 45 reservations. These studies, in many instances, will result in requests for adjudication of reserved Indian rights and will have a serious impact on the workload of the Solicitor's Office.

This, coupled with the concentration of resource related branches of BIA in the Office of Trust Responsibilities, indicates a concerted effort by BIA to inventory Indian resources, identify the problem areas, prepare the necessary back-up files and then request litigation.

We do not have the capacity to absorb the increased workload occasioned by this BIA emphasis on trust responsibility, as all eleven attorneys now assigned to the Division of Indian Affairs are engaged full time in other Indian legal matters. Half of the attorneys are assigned full-time to lands and resources problems, including those relating to water rights, minerals, timber, grazing, etc. The balance of the attorneys in the Division devote their full time to problems of tribal government, enrollment, taxation, jurisdiction, law enforcement, and the entire breadth of Indian law. This has included, most recently, the administration of such special statutes as the Alaska Native Claims Settlement Act of 1971, which has demanded nearly the full time of one attorney. Some 254 Indian cases of various kinds are in litigation and require constant attention.

A further demand being placed upon our legal staff both in Washington and the field is a result of activities of certain militant Indian civil rights and other activist groups which have directly and indirectly had significant impact upon the work of the Solicitor's Office. For example, the 70-day American Indian Movement occupation of Wounded Knee, South Dakota, required the temporary detail of three attorneys from Washington, plus one each from the field offices in Billings, Montana, Tulsa, Oklahoma, and Aberdeen, South Dakota. This activity alone has already required some three man-months of out-of-office time, and more meetings are scheduled to implement the agreement which resulted in the cessation of the occupation. From information available, similar situations could arise at any time in Oklahoma, Iowa, Arizona, North Carolina or, indeed, in almost any area of the United States. In addition to direct confrontations such as the "BIA takeover" and the Wounded Knee occupation, the Indian activists have generated a large amount of additional office work. This consists of answering correspondence from the general public, members of Congress and the groups themselves, investigating and answering all sorts of petitions and other written demands, preparing for and testifying before Congressional committees, gathering information and preparing defenses to litigation, attending conferences and meetings, and generally responding to a whole new range of activities that were unheard of less than one year ago. The end is nowhere in sight. Indeed, such activities and the resultant demands upon the attorneys' time will, no doubt, continue to increase.

The increased efforts by BIA regarding Indian resources is inevitably reflected in our workload. We are already feeling it in the Washington office, in the Sacramento and Portland regions, and also in field offices such as Twin Cities, Albuquerque, and Billings. Assigning priority to requests for litigation is an increasing problem since each tribal delegation coming to town inevitably feels that its request should be given priority over all others.

Finally, the Bureau and this office have jointly embarked upon a program of more rigorous advocacy and the bringing of affirmative legal actions to protect Indian claims to natural resources -- the Pyramid Lake case is merely one example of such contemplated actions.

The addition of three attorneys (GS-14, GS-13 and GS-12) and two secretaries (GS-6 and GS-5) to the Office of the Solicitor is an absolute necessity if the work in the trust responsibilities field is to be properly carried out.

The following is a breakdown of the funding requirement necessary to accomplish these responsibilities:

1 GS-14	$ 24,247
1 GS-13	20,677
1 GS-12	17,497
1 GS- 6	8,977
1 GS- 5	8,055
Salaries	$ 79,453
Benefits	$ 7,147
Travel	30,000
Other expenses: supplies, equipment, services, books, etc.	3,300
Total	$119,900

VI. PATENT CONTRACTING

The increased R&D budget of the various bureaus and offices in the past several years has gradually increased the number of inventions awaiting the preparation of patent applications for filing in the U.S. Patent Office. Without additional assistance, patent rights in valuable inventions are sure to be lost by reason of long delays in filing patent applications.

The invention docket has reached a point where valuable technology is being withheld from the public to prevent the loss of valuable Government patent rights. An additional workload is expected because of the recently implemented Government-wide Exclusive Licensing Program and the backlog is expected to increase. The most efficient method of reducing the backlog is to solicit an contract effort to prepare patent specifications for the Department. Other agencies, e.g., NASA, EPA and HEW, have used this method in lieu of hiring additional attorneys.

Patent soliciting includes all necessary duties of a patent attorney in connection with preparing and filing a patent application in the U.S. Patent Office. This includes all levels of Patent Office or court action such as preparation of briefs and documents, acting as attorney in the taking of depositions, presenting oral arguments and negotiating settlement of interferences with opposing parties. Statistically, about 35% of the invention disclosures reported to the Department are considered worthy of

filing. By far, one of the most time consuming operations is the preparation and filing of cases. Preparation of a patent application on a single invention may require as much as two man weeks. As a direct result of such filing, the Department presently has a portfolio of over 400 U.S. patents available for licensing. As additional cases are filed each year, additional workload is generated in responding to actions by the U.S. Patent Office. This added workload will further increase the backlog of inventions.

The Federal Council for Science and Technology approved and submitted a restatement of Government patent policy to the President which would permit exclusive licensing to encourage introduction of Government-owned inventions into commerce. Solicitor's Office patent personnel participated in development of the restatement and model implementing regulations. The GSA regulations have been in effect since May 7, 1973. The Solicitor's Office has published implementing instructions in the Federal Register for rule-making. In anticipation of approval of the Department regulations, the study and development of procedures for implementing an exclusive licensing program have been continued. Examples of areas expected to be affected by such a program are: (a) invention evaluation, (b) soliciting techniques, (c) cataloging of inventions, (d) publicizing of portfolio, (e) processing license requests, (f) providing technical assistance, (g) monitoring of commercialization, and (h) changing Interior's procurement regulations.

The most effective means for reducing the inventory of inventions to a workable size is to contract out the searching and filing of a number of cases. An increase in FY 1975 of $41,200 would provide funds for reducing the backlog each year by approximately 52 cases. This would not eliminate the backlog entirely, but it would serve to significantly reduce it and to lessen the time lost on the remaining backlog cases.

Cases would be contracted out for search and patentability report. This should cost about $150 per case. Approximately half of the cases should then be contracted out for filing and prosecution at about $800 per case for filing plus $500 per case for follow-on prosecution. This makes up an average total cost per case of $800.

Searching and patent specification writing are the two aspects of patent soliciting which lend themselves to contracting out. Each of the efforts may be performed by a patent professional, an engineer with technical writing ability. The preparation of the claims requires additional experience and knowledge of the Rules of Practice and case law. The U.S. Patent Office admits non-lawyers to the Patent Office Bar upon passing the Patent Agent's examination as Patent Agents. Patent law firms in the Washington area utilize Patent Agents and engineering graduates attending night law school to provide lower cost services for their clients. Utilizing such professionals to prepare patent specifications would result in a much more rapid reduction of the invention inventory and more efficient utilization of Division staff to perform the legal functions of our work.

Another advantage of contracting out certain cases is the ability to select contractors according to their technical expertise. It is important to the effective preparation of a well written patent specification that the patent attorney thoroughly understand the technology of the invention. Although the present patent staff has specialized to the extent possible, it would be impossible to have an employee expert in every area of technology for which the Department has primary responsibility. This specialized expertise may be readily obtained through the selection of several law firms with large staffs.

Contracting out patent specification writing will first, reduce the existing backlog to a workable level, second, maintain the docket at a level which will provide timely action by the Division, and third, provide some time for the anticipated increased legal effort caused by the GSA Licensing Regulations (38 F.R. 3328). In addition, a substantial new workload, i.e., contract administration, will be generated by the Federal Procurement Regulations published at 38 F.R. 23782. The Licensing Regulations deal primarily with using (licensing) inventions owned by the Government. The Procurement Regulations are primarily directed to acquiring rights to inventions made by contractors. Some of the additional effort required for the licensing program will be concerned with disseminating technical information submitted under the patents program, reviewing applications for licenses, making determinations of rights and negotiating the license agreements. The technical information in a patent application is a marketable commodity. The licensing program of the Department will add value to the information by abstracting, categorizing, separating out the significant, dividing the relevant from the non-relevant, and by interpretation, analysis, repacking and provision of local access.

Additional effort will also be required by the previously mentioned FPRs. For example, the Solicitor's Office will have the responsibility for establishing a procedure for identifying contractor inventions. This review will comprise reading the contract work statement and determining whether the contract work is likely to produce inventions. Final technical reports from the contractor will also be reviewed and a bench check will be made before final payment to the contractor to assure that the Government is receiving rights to inventions made under the contract.

Office	Number of Cases	Fiscal Year 1975 (and succeeding years) Expenditures
Bureau of Mines	25	$19,800
Office of Saline Water	14	11,000
Office of Coal Research	7	5,600
Geological Survey	2	1,600
Bureau of Sport Fisheries and Wildlife	1	800
Bureau of Reclamation	2	1,600
Bureau of Land Management	1	800
Total	52	$41,200

VII. WORD PROCESSING CENTERS

Consistent with the Secretary's direction to modernize and thereby increase the efficiency of the Solicitor's Office, we have been studying our paper flow. The new field of word processing seems to provide a solution to a difficult problem.

Word processing consists essentially of having all attorneys give their work to the secretaries through the medium of dictation equipment and the secretaries transcribe this work on to some type of magnetic-card typewriter. The secretaries' jobs and geographic locations are altered to allow a sophisticated procedure for concentrating skilled personnel and equipment to insure optimum efficiency.

The advantages of dictation equipment over written drafts are many, including speed, natural form, and efficient use of both dictator's and secretaries' time. Work Processing Centers couple the advantages of dictation equipment with the advantages of automated typewriters, allowing greater speed and the ability to produce multiple successive drafts, as well as a finished product, automatically. The nature of material produced in a legal office makes the multiple successive draft feature of the system a significant saver of time and energy.

We are requesting $112,000 to install similar centers in the other divisions in our office. We have the utmost confidence that by changing to this new system, legal advice to the Department will be expedited and, therefore, more readily available.

It is estimated that each Center will pay for itself over a period of 2-3 years. This estimate is based largely on a reduction in the number of secretarial personnel required. However, additional savings will be gained by Center users due to the increased speed with which all typing requirements are processed.

Division	Mag. Card	Dict.	Trans.	Total
Conservation & Wildlife	$ 9,000	$ 6,435	$ 1,980	$ 17,415
Energy & Resources	15,000	9,405	4,950	29,355
General Law	18,000	11,880	5,940	35,820
Mine Health & Safety	15,000	9,900	4,455	29,355
Total Costs	$57,000	$37,620	$17,325	$111,945

Cost Data: 1 Magnetic Card Typewriter costs $3,000 per year (rental).
1 Dictating machine costs $495 (purchase).
1 Transcriber costs $405 (purchase).

Above costs based on one dictating machine per attorney, one transcriber per secretary and one Magnetic Card machine for every four attorneys.

VIII. COMPLETION OF FIELD LAW LIBRARIES

The Solicitor's Office is requesting $60,000 in FY 1975 to allow purchase of law books necessary to bring the law libraries in our field offices to a complete and balanced status.

A complete law library is essential to the preparation of sound legal advice. The library must contain a balanced collection of volumes. Because of the rapidly changing body of law dealing with the areas of responsibilities of the Interior Department (e.g., energy regulation, natural resources, environmental protection, etc.), it is necessary that a legal library contain various serial reporter sets dealing with these cases. It is also necessary to have volumes which contain an in-depth analysis of different broad areas of the law such as found in legal encyclopedias and treatises. Without a complete and balanced legal library, it is easy for an attorney to miss the latest case in point or to gain only a partial understanding of a particular legal area. This can result in the attorney giving his Departmental client outdated or incomplete advice which, in turn, may well result in needless litigation dollars or a waste of Departmental funds.

Law books, despite their paramount importance to the attorney, have been sadly neglected in many cases, due to restricted funds. When the Solicitor's Office is short of money, the only flexibility it has besides actual personnel reductions is to reduce travel and equipment expenditures. Each year, the cumulative effect of this reduction has become more acute, with the result that the following expenditures are necessary to complete the field office law libraries.

Anchorage, Alaska	$ 500
Atlanta, Georgia	15,000
Denver, Colorado	300
Philadelphia, Pennsylvania	28,000
Portland, Oregon	2,800
Sacramento, California	8,000
Salt Lake City, Utah	400
Tulsa, Oklahoma	5,000
TOTAL	$60,000

IX. GSA SPACE COST

The Public Buildings Amendments of 1972, Public Law 92-313, states that effective July 1, 1974, using agencies will be charged for all space, services and facilities provided in General Services Administration controlled facilities as well as the leased facilities.

It has been determined that the Office of the Solicitor will be assessed $681,000 in user charges for the space now occupied and for projected occupancy in FY 1975.

We are requesting an appropriation increase for the above amount to be included in our budget for FY 1975.

Personnel Summary

	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions.....	370	451	472
Full-time equivalent of other positions.	4	4	4
Average paid employees	332	399	462
Average GS grade	10.4	10.5	10.5
Average GS salary	$17,692	$18,612	$18,609

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ITEMIZATION OF ESTIMATE

Appropriation Title: Salaries and Expenses Office of the Solicitor

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) or Decrease (-)
Program and Financing:				
Total obligations	$7,245,919	$9,072,388	$11,520,000	$+2,447,612
Unobligated balance lapsing	105,079	---	---	---
New obligational authority	7,350,998	9,072,388	11,520,000	+2,447,612
New Obligational Authority:				
Appropriation	7,360,000	9,094,000	11,520,000	+2,426,000
Transferred to other accounts	-9,002	-21,612	---	+ 21,612
Appropriation adjusted	7,350,998	9,072,388	11,520,000	+2,447,612
Object Classification				
11 Personnel compensation	5,911,836	7,280,388	8,501,000	+1,220,612
12 Personnel benefits	515,847	678,000	766,000	+ 88,000
13 Benefits for former personnel	1,584	10,000	---	- 10,000
21 Travel and transportation of persons	173,840	270,000	486,000	+ 216,000
22 Transportation of things	7,423	10,000	62,000	+ 52,000
23 Rent, communications and utilities	239,336	287,000	1,070,000	+ 783,000
24 Printing and reproduction	26,271	33,000	37,000	+ 4,000
25 Other services	173,209	207,000	305,000	+ 98,000
26 Supplies and materials	74,536	154,000	180,000	+ 26,000
31 Equipment	122,037	143,000	113,000	- 30,000
Total obligations	7,245,919	9,072,388	11,520,000	+2,447,612

DEPARTMENT OF THE INTERIOR

Office of the Secretary

SALARIES AND EXPENSES

HIGHLIGHT STATEMENT

The fiscal year 1975 appropriation request for the account "Salaries and Expenses," Office of the Secretary is $20,047,000, a decrease of $5,465,738.

Maintaining Current Level of Operations

An increase of $2,215,962 is needed to maintain the current level of support for existing staff operations. Included in this amount is $1,673,000 for the base cost of space, services and facilities provided by GSA in accordance with Public Buildings Amendments of 1972, P.L. 92-313. The remaining $542,962 is requested for within-grade step increases, reduction of lapses, and other unavoidable increased costs over which the Department has no control.

Supplemental Annualization

An increase of $363,000 is requested to annualize supplemental appropriations in fiscal year 1974. This amount includes $233,000 for the October 1973 pay increase and $130,000 for full year funding for the additional Field Coordination Staff.

Program Increases

Program increases of $842,800 and 28 positions are requested in the following areas.

- Assistant Secretary - Program Development and Budget - $315,100 and 12 positions for Policy Analysis and Environmental Review.

- Assistant Secretary - Land and Water Resources - $98,700 and four positions to assist the Assistant Secretary in meeting Departmental priority demands for an accelerated gas, coal, geothermal and oil shale leasing program.

- Administrative Management - $377,000 and 12 positions to strengthen the Department's overall management capabilities and for the increased workload associated with new programs. Specific areas of increase include:

  (a) Contract funds to develop, test, and implement Departmentwide ADP Systems - $50,000.

  (b) Workload increases associated with personnel and fiscal services occasioned by program expansion - $97,000 and 4 positions.

  (c) $58,000 and 2 positions to strengthen the Department's personnel management program.

  (d) $172,000 and 6 positions for the Office of Management Services to strengthen the areas of procurement policy and review, personnel safety, records, and property management.

. General Services - An increase of $52,000 is requested for space costs for the additional positions included in this estimate.

Funding Change

Offsetting the above mentioned increases are several program elements that have previously been included in the Office of the Secretary's "Salaries and Expenses" budget. These offsetting decreases amount to $8,887,500 and 79 positions for fiscal year 1975 and are as follows:

1. Office of Energy Data and Analysis - 30 positions and $2,400,000. This Office is included in the appropriation request "Energy Conservation and Analysis" for fiscal year 1975.

2. Office of Energy Conservation - 39 positions and $5,900,000. This Office is also included in the appropriation request "Energy Conservation and Analysis" for fiscal year 1975.

3. Office of Research and Development - 10 positions and $587,500. This Office is included in the appropriation request "Departmental Operations," for fiscal year 1975.

OFFICE OF THE SECRETARY
SALARIES AND EXPENSES

Appropriation, 1973	$15,295,100	
Transferred to other accounts:		
Transferred to "Operating Expenses, Public Buildings Service," General Services Admin.	-41,702	
Total available, 1973		$15,253,398
Appropriation, 1974	15,495,000	
Supplemental appropriation, 1974	8,960,000	
Proposed supplemental for 1974 pay costs	1,100,000	
Transferred to other accounts:		
Transferred to "Operating Expenses, Public Buildings Service," General Services Admin.	-42,262	
Total available, 1974		25,512,738

Summary of Increases and Decreases, 1975

Increases:	Base 1975	Increase 1974	
Annualization of fiscal year 1974 pay cost	$1,100,000	+233,000	
Annualization of fiscal year 1974 supplemental	120,000	+130,000	
Maintain current level of operations	15,452,738	+2,215,962	
Program Increases:			
Departmental Direction:			
Policy analysis and environmental review	---	+315,100	
Program Direction and Coordination:			
To assist in accelerated gas, coal, geothermal and oil shale leasing, and Trans Alaskan pipeline surveillance	---	+98,700	
Administrative Management:			
To strengthen the Department's overall management capabilities	---	+377,000	
General Services:			
Space cost for program expansion	---	52,000	
Net Increase			+3,421,762
Decreases:			
Program Direction and Coordination:			
Comparative transfers of energy functions to "Departmental Operations," and "Energy Conservation and Analysis."	---	$-8,887,500	
Net Decrease			$-5,465,738
Budget Estimate, 1975			20,047,000

SALARIES AND EXPENSES, OFFICE OF THE SECRETARY

Analysis by Activities

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Total Appropriation	F.Y. 1974 Pay Cost Supplemental	F.Y. 1974 Transfers 1/	F.Y. 1974 Adjusted Amount Available
1. Departmental Direction.....	$ 5,949,491	$ 6,728,700	$ 464,300	$+210,638	$ 7,403,638
2. Program Direction and Coordination.....	2,574,856	11,214,700	204,600	---	11,419,300
3. Administrative Management....	6,090,562	6,193,900	431,100	-252,900	6,372,100
4. General Services.....	260,198	317,700	---	---	317,700
Unobligated Balance Lapsing..	378,291	---	---	---	---
Total.....	15,253,398	24,455,000	1,100,000	-42,262	25,512,738

1/ Transfer of International Activities ($156,900) and Correspondence Control ($96,000) from Administrative Management to Departmental Direction.
Transfer of $42,262 to GSA for rent.

Analysis by Activities

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Adjusted Amt. Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
1. Departmental Direction.....	$ 5,949,491	$ 7,403,638	$ 8,229,900	$+826,262
2. Program Direction and Coordination.....	2,574,856	11,419,300	2,713,800	-8,705,500
3. Administrative Management...	6,090,562	6,372,100	6,959,300	+587,200
4. General Services.....	260,198	317,700	2,144,000	+1,826,300
Unobligated Balance Lapsing.	378,291	---	---	---
Total.....	15,253,398	25,512,738	20,047,000	-5,465,738

OFFICE OF THE SECRETARY
SALARIES AND EXPENSES

ANALYSIS OF INCREASES

Activity/Subactivity	F.Y. 1974 Adj. Approp. Positions	F.Y. 1974 Adj. Approp. Funds	F.Y. 1975 Increases: Annualization of FY 1974 Pay Cost	F.Y. 1975 Increases: Supplemental Annualization	F.Y. 1975 Increases: Maintain Current Level of Operation	F.Y. 1975 Increases: New Pos. & Related Funds	F.Y. 1975 Increases: Total Increases Positions	F.Y. 1975 Increases: Total Increases Funds	F.Y. 1975 Appropriation Request Positions	F.Y. 1975 Appropriation Request Funds
1. Departmental Direction:										
Immediate Office of Secy..	17	$ 593,900	$ 8,400	$ ---	$ 11,100	$ ---	--	$ 19,500	17	$ 613,400
Office of the Under Secy..	22	510,100	7,600	---	6,500	---	--	14,100	22	524,200
International Activities..	6	168,900	2,500	---	54,200	---	--	56,700	6	225,600
Field Coordination.....	22	591,552	6,000	130,000	548	---	--	136,548	22	728,100
Office of Communications..	14	325,600	5,100	---	76,000	---	--	81,100	14	406,700
Office of Equal Oppor.....	95	2,247,486	29,300	---	85,414	---	--	114,714	95	2,362,200
A/S - Congressional & Legislative Affairs.....	40	812,100	12,300	---	15,000	---	--	27,300	40	839,400
A/S - Program Dev. & Bdgt.	69	2,154,000	27,100	---	34,100	315,100	12	376,300	81	2,530,300
Subtotal.....	285	7,403,638	98,300	130,000	282,862	315,100	12	826,262	297	8,229,900
2. Program Direction & Coord:										
A/S - Energy & Minerals...	109	9,666,300	13,700	---	12,300	-8,887,500	-79	-8,861,500	30	804,800
A/S - Land & Water Resour.	26	704,200	12,100	---	8,300	98,700	4	119,100	30	823,300
A/S - Fish & Wildlife & Parks.....	17	415,300	6,900	---	7,700	---	--	14,600	17	429,900
Territorial Affairs.....	13	396,500	6,500	---	7,300	---	--	13,800	13	410,300
Indian Affairs.....	8	237,000	4,100	---	4,400	---	--	8,500	8	245,500
Subtotal.....	173	11,419,300	43,300	---	40,000	-8,788,800	-75	-8,705,500	98	2,713,800
3. Administrative Management:										
A/S - Management.....	7	207,500	3,000	---	3,900	---	--	6,900	7	214,400
ADP Management.....	7	205,300	2,800	---	3,800	50,000	--	56,600	7	261,900
Secretarial Operations....	38	684,800	10,800	---	12,200	97,000	4	120,000	42	804,800
Audit & Investigation.....	123	2,879,000	38,800	---	55,100	---	--	93,900	123	2,972,900
Management Operations.....	48	778,900	11,300	---	16,100	---	--	27,400	48	806,300
Management Consulting.....	20	527,300	7,900	---	7,800	---	--	15,700	20	543,000
Personnel Management.....	33	632,800	9,900	---	13,600	58,000	2	81,500	35	714,300
Management Services.....	18	456,500	6,900	---	6,300	172,000	6	185,200	24	641,700
Subtotal.....	294	6,372,100	91,400	---	118,800	377,000	12	587,200	306	6,959,300
4. General Services.....	--	317,700	---	---	1,774,300	52,000	--	1,826,300	--	2,144,000
GRAND TOTAL.....	752	25,512,738	233,000	130,000	2,215,962	-8,044,700	-51	-5,465,738	701	20,047,000

1. DEPARTMENTAL DIRECTION

Analysis by Subactivities

Subactivity	F.Y. 1973 Amount Available	F.Y. 1974 Total Appropriation	F.Y. 1974 Pay Cost Supplemental	F.Y. 1974 Transfers 1/	F.Y. 1974 Adjusted Amount Available
(a) Immediate Office of the Secy..	$ 564,542	$ 554,300	$ 39,600	$ -----	$ 593,900
(b) Office of the Under Secretary.	382,414	378,700	35,400	+96,000	510,100
(c) International Activities.....	---	---	12,000	+156,900	168,900
(d) Field Coordination.....	589,243	563,500	28,600	-548	591,552
(e) Office of Communications.....	304,972	301,800	23,800	---	325,600
(f) Office for Equal Opportunity..	1,703,354	2,150,000	139,200	-41,714	2,247,486
(g) Asst. Secy. - Congressional and Legislative Affairs.....	759,126	754,300	57,800	---	812,100
(h) Asst. Secy. - Program Development and Budget.....	1,645,840	2,026,100	127,900	---	2,154,000
Total.....	5,949,491	6,728,700	464,300	+210,638	7,403,638

1/ Transfer of International Activities ($156,900) and Correspondence Control ($96,000) from Adm. Mgmt. to Departmental Direction.

Transfer of $42,262 to GSA for rent.

1. DEPARTMENTAL DIRECTION

Analysis by Subactivities

Subactivity	F.Y. 1973 Amount Available	F.Y. 1974 Adjusted Amt. Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974 Total
(a) Immediate Office of the Secy..	$ 564,542	$ 593,900	$ 613,400	$ +19,500
(b) Office of the Under Secretary.	382,414	510,100	524,200	+14,100
(c) International Activities.....	---	168,900	225,600	+56,700
(d) Field Coordination.....	589,243	591,552	728,100	+136,548
(e) Office of Communications.....	304,972	325,600	406,700	+81,100
(f) Office for Equal Opportunity..	1,703,354	2,247,486	2,362,200	+114,714
(g) Asst. Secy. - Congressional and Legislative Affairs.....	759,126	812,100	839,400	+27,300
(h) Asst. Secy. - Program Development and Budget.....	1,645,840	2,154,000	2,530,300	+376,300
Total.....	5,949,491	7,403,638	8,229,900	+826,262

1. DEPARTMENTAL DIRECTION

(a) Immediate Office of the Secretary: Fiscal year 1974, $593,900; fiscal year 1975, $613,400; increase, $19,500. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+11,100	--	$613,400	17	Additional funding for current staff support.
(2)	+ 8,400	--	---	--	Pay cost annualization.
	+19,500	--			

Cost Factors Involved in Increases

(1) $9,500 for within-grade step increases, $500 for travel, and $1,100 for communications.

(2) Annualization of the pay increase effective 10/14/73.

The Immediate Office of the Secretary provides the direct staff assistance to the Secretary in carrying out the overall direction and coordination responsibilities for the Department in addition to the day-to-day administrative activities necessary for this cabinet level office. This office consists of an immediate staff of 17 positions. An increase of $19,500 is requested for pay cost annualization, within-grade step increase costs, and other support costs associated with maintaining the current level of support for this office.

(b) Office of the Under Secretary: Fiscal year 1974, $510,100; fiscal year 1975, $524,200; increase, $14,100. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+6,500	--	$524,200	22	Additional funding for current staff support.
(2)	+7,600	---	---	--	Pay cost annualization.
	+14,100	--			

Cost Factors Involved in Increases

(1) $5,200 for within-grade step increases, $1,100 for travel, and $200 for communications.

(2) Annualization of the pay increase effective 10/14/73.

The Under Secretary assists the Secretary in the discharge of his duties and, in his absence, performs his functions. With the exception of certain matters reserved by the Secretary, the Under Secretary has the full authority of the Secretary.

During the current fiscal year the Department's correspondence control function was placed under supervision of the Under Secretary's Office. This reassignment resulted in six positions and $96,000 being transferred from the Office of Management Operations. This small unit is responsible for the disposition of all official correspondence directed to the Secretariat and the Department, and for the

Department's policies and procedures in the field of correspondence management.

An increase of $14,100 is requested to carry out these functions in fiscal year 1975.

(c) Office of International Activities: Fiscal year 1974, $168,900; fiscal year 1975, $225,600; increase $56,700. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+56,700	--	$225,600	6	Additional funding for current staff support.

Cost Factors Involved in Increase

(1) $2,500 for pay cost annualization; $50,700 for salaries and benefits for two additional man-years of employment; $2,000 for travel; $1,000 for communications, and $500 for supplies.

The Office of International Activities is responsible for the development and coordination of the international affairs of the Department. The office is responsible for identifying and fostering both short and long range program objectives of the Department in the international activities field; for coordinating departmental objectives with those of the Department of State and other Federal agencies; and for carrying out special assignments on a wide range of international activity program matters. In fiscal year 1972, this office started the coordination of selected bilateral research programs utilizing excess foreign currencies. The Office of International Activities serves as the non-technical coordinating staff to insure that this cooperative effort is compatible with the Department's domestic priorities and major objectives of U.S. foreign policy.

In addition to the positions shown above two reimbursable positions have always been a part of the International Activities staff. These positions were funded predominately by the Agency for International Development, although most of their time was devoted to Interior mission assignemnt. In recent years, the AID funding has been reduced while the cost of these positions continue to increase. Future year funding from AID seems doubtful.

The requested increase of $56,700 will provide the Department with a fully funded International Activities Office capable of developing and coordinating the Department's international affairs. Contingent upon approval of this funding request the two reimbursable positions will be added to the Office's direct program.

(d) Field Coordination: Fiscal year 1974, $591,552; fiscal year 1975, $728,100; increase, $136,548. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+130,548	--	$728,100	22	Supplemental annualization.
(2)	+6,000	--	---	--	Pay cost annualization.
	+136,548	--			

Cost Factors Involved in Increases

(1) Half year cost of six positions authorized in fiscal year 1974 supplemental.

(2) Annualization of the pay increase effective 10/14/73.

At the present time there are seven special assistants for field coordination with related clerical support under supervision of the Secretary. These special assistants are located in the following cities; San Francisco, Calif.; Portland, Oregon; Denver, Colorado; Albuquerque, New Mexico, Chicago, Illinois; Boston, Massachusetts; and Atlanta, Georgia. In addition, a professional with clerical support is located in the Washington office to handle the staff work associated with these offices. The principle functions of these important staff officers are as follows:

. Maintain active liaison with appropriate Federal state, interstate and private interests.

. Provide continual surveillance in the field for the Secretary over the entire range of the Department's program activities.

. Coordinate matters of program and policy in the field where more than one bureau or program is involved.

. Serve as Chairman of the Field Committees established in their respective regions. Field Committees are composed of regional directors or other higher ranking officials appointed by heads of bureaus or offices to foster Departmental policy objectives by improving coordination at the field level.

An amendment to Executive Order 11647, signed July 23, 1973, mandated Interior membership on each of the Federal Regional Councils, situated in the ten designated Federal regional capital cities; Boston, New York, Philadelphia, Atlanta, Chicago, Kansas City, Dallas, Denver, San Francisco, and Seattle. The duties of the Field special assistants were expanded to include representation on the Councils in their respective regions. These duties, undertaken in concert with the other eight Federal members of the Councils are to assist state and local governments by coordination and expediting delivery of major Federal grants and services to the field.

In addition to the Field special assistants, three staff assistants with clerical support were added in fiscal year 1974 to cope with the additional staff work entailed by Federal Regional Council membership and to serve as alternates to the special assistants in three of the Federal Council cities where the Secretary's Office was not co-located -- Seattle, Dallas and Kansas City -- Western areas where Interior program involvement is strong, and there is likehood of useful Council involvement.

An increase in the amount of $130,548 is requested to cover the annual costs of the program and to handle workloads already undertaken in line with the Department's membership in the Federal Regional Council system. The remaining $6,000 is to cover the annual cost of the October 14, 1973 pay increase.

(e) Office of Communications: Fiscal year 1974, $325,600; fiscal year 1975, $406,700; increase, $81,800. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$+81,100	--	$406,700	14	Additional funding for current staff support and pay cost annualization.

Cost Factors Involved in Increases

Two additional man-years of professional employment @ $35,000. $6,000 for within-grade step increases and office support costs, and $5,100 for annualization of the October 1973 pay increase.

The Office of Communications performs public information services for the Secretary, all other offices within the Secretariat, and for several bureaus and offices within the Department. These services include advising the Secretariat on media and public attitudes relating to Interior missions and activities; developing media and community relations by establishing channels through which issues affecting the Interior Department may be presented publicly; providing information to the communications media, the public, private industry and other organizations on matters relating to Interior's policies, functions and programs; overseeing adherence to the Freedom of Information Act and coordinating with the Solicitor on matters pertaining to that Act. The Office of Communications also has responsibility for developing or coordinating development of special programs and projects of a public educational and informational nature such as the Johnny Horizon Program. In view of the energy crisis, the Department's role in minerals assessment and development, leasing, research and exploration programs in fossil fuels and geothermal energy is currently accentuated, and the media relations and interpretation roles of the Office of Communications are commensurately heavier. With the Freedom of Information Act as a basic guide, the Office of Communications advises information personnel engaged in the activities of the major bureaus and offices of the Department. On matters that involve more than one activity, the Office of Communications is responsible for preparing and issuing press releases relating to major developments, including special materials for television and radio media. It is also responsible for writing speech texts for the Secretary, compiling and editing special publications for widespread public distribution (such as the Conservation Yearbook); and providing staff direction to achieve better coordination of services at the Department level in the areas of exhibits, motion pictures, still photography, and publications.

The increase of $81,100 is based on an urgent need to provide the Department and all of its bureaus and offices with sufficient support staff, guidance and adequate liaison in carrying out new activities and initiatives. Additional responsibilities placed on the Department will require that this Office be fully staffed with highly competent informational specialists to assure that the public is fully informed and aware of the importance of consumer-oriented programs. The $81,100 increase will provide for two additional man-years of professional informational assistance, $6,000 for within-grade step increases and other increased office support costs, and $5,100 for annualization of the October 14, 1973 pay increase.

(f) Office for Equal Opportunity: Fiscal year 1974, $2,247,486; fiscal year 1975, $2,363,200; increase, $114,714. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+85,414	--	$2,362,200	95	Additional funding for current staff support.
(2)	+29,300	--	---	--	Pay cost annualization.
	+114,714	--			

Cost Factors Involved in Increases

(1) $30,200 for within-grade step increases, $15,000 for travel, $32,714 for rent, communications and utilities; $5,500 for other services and $2,000 for supplies.

(2) Annualization of the pay increase effective 10/14/73.

The Office for Equal Opportunity provides top level management and direction of the Department's equal opportunity programs which are carried out in compliance with the Civil Rights Act of 1964 (P.L. 88-352), related statutes, and applicable Executive Orders. The functions of the Office include the following activities:

- Developing, implementing, and coordinating the Department's equal opportunity policies and programs.
- Directing compliance and investigative activities relating to recipients or subrecipients of the Department's financial assistance programs.
- Directing compliance and investigative activities relating to Governmentwide contractors and subcontractors in eight major industries and in the State of Alaska.
- Developing and carrying on a formal minority business enterprise program.

In order to carry out the programs listed below additional funding to support the currently authorized staff will be needed.

An increase of $85,414 will be used for within-grade step increases, reduction of lapses, and other costs associated with maintaining current program levels. In addition, $29,300 is needed to annualize the pay increase effective 10/14/73.

Equal Employment Opportunity Program - The Office for Equal Opportunity provides the leadership in assuring that women and minority group employees and those seeking employment in the Department have an equal chance to participate fully in the total range of Departmental employment irrespective of occupational category or grade level. Plans and programs for fiscal year 1975 include:

- Coordinating a Departmental affirmative Equal Employment Opportunity Program which requires action by each bureau and office to ensure equal opportunity in employment and in all education and training activities connected with employment that enhance employees' opportunities to develop to their highest potential. Plans include emphasis in the special interest program areas, i.e., the Federal Women's Program and the Spanish Surnamed Program.
- Coordinating, in addition to a national Departmental program, such regional affirmative action programs as necessary to ensure action

in each geographical area in which the bureaus and offices of the Department are located, as required by the Equal Employment Opportunity Act of 1972. Such regional programs shall be based on equal employment opportunity conditions of the region involved.

- Conducting a series of Equal Employment Opportunity awareness seminars for the bureaus' field managers and supervisors, assuring that they have full knowledge of Equal Employment Opportunity program requirements and their responsibilities.

- Centralize the discrimination complaint investigation process in the Office for Equal Opportunity to ensure that the time requirements (180 days) of the Equal Employment Opportunity Act of 1972 are met.

- Expand the recruitment program nationwide to involve on-site visitations of education and training resource institutions by geographic region wherever there is a nucleus of bureau installations. The recruitment program will include community contact projects to assure that both public and private education institutions are knowledgeable of the Department's career opportunities and qualifying requirements.

- Expand the overall review and evaluation program to include participation of EEO staff in all personnel management reviews conducted by the Department, the Civil Service Commission, or the bureaus.

- Provide person-to-person counsel and assistance to EEO officials of bureau headquarters offices and all field facilities to ensure the development of their expertise in the implementation of increased program requirements.

Federal Assistance Program - Title VI, Civil Rights Act of 1964 - The Office for Equal Opportunity conducts compliance reviews of recipients receiving financial assistance from programs administered by the Department. The reviews are designed to ensure that minorities and women participate in, receive the benefits of, and are not subjected to discrimination in the following major areas:

1. Recreation Systems
2. Historic Sites
3. Water Districts
4. Fish and Game Preservation
5. Youth Conservation Corps
6. Hunter Safety Programs

In addition, the Title VI Division reviews a number of private organizations who receive assistance in the form of land leases from the Bureau of Land Management, and special use permits through the National Park Service and the Bureau of Sport Fisheries and Wildlife.

Planned goals of accomplishment for fiscal year 1975 include:

- Increasing the number of minorities and women on appointed advisory boards and commissions. Such appointments will ensure that minorities and women are included in the selection, planning and development of federally assisted programs. Ensuring that the quality of services rendered to predominately minority neighborhoods are comparable to the services of predominately Caucasian neighborhoods.

- Conducting surveys of how states ensure that historic sites where the major contribution was made by minorities and women are placed on the Federal Register and subsequently funded.

- Conducting surveys to determine how states include contributions by minorities and women at sites where the major contribution was not made by minorities or women.

- Printing more official literature in Spanish.

- Displaying pictures of minorities and women in brochures, pamphlets, and other informational materials.

- Increasing the number of minority and female corpsmembers and staff in the Youth Conservation Corps. An increase in enrollment will expose more youth to the occupational opportunities available in Natural Resource Agencies.

Government Contract Compliance Program - The Department of Labor's Office of Federal Contract Compliance has assigned the Department of the Interior Governmentwide Contract Compliance responsibilities for the following eight industries:

1. Fishing Industry
2. Mining Industry
3. Crude Petroleum, Natural Gas, Petroleum Refinery, and Related Industries
4. Rubber and Plastic Products
5. Pipeline Transportation
6. Motels and Other Lodging Places
7. Automobile Accessory Stores and Retail Gasoline Stations
8. Forestry

In addition, the Department has been assigned responsibility for the entire Contract Compliance Program for the State of Alaska, as well as its own construction sites. The assignment includes approximately 3,800 facilities.

No increases are requested for fiscal year 1975. However, there are two variables that may affect priorities and future funding requirements. They are (1) the proliferation of the Office of Federal Contract Compliance approved area or "Hometown" plans to integrate the construction industry and (2) the construction of the proposed Trans-Alaska pipeline. Both of these items have high priority in the Office of Federal Contract Compliance and potentially amount to many new job opportunities for minorities and in the case of the pipeline, particularly Native Alaskans. The Department will closely evaluate this additional developing workload to determine if increased funding is warranted.

Minority Business Enterprise Program - In fiscal year 1974 the Office for Equal Opportunity was given responsibility for developing and carrying on a formal minority business enterprise program mandated by Executive Order 11625. The Office is responsible for providing leadership and guidance to the bureaus and offices in the development of positive approaches to wider utilization of minority group individuals and business firms when contracting for goods, services, and construction. In addition, the Office will assist the bureaus and offices in determining ways to help in the development of minority business enterpreneurs.

(g) Assistant Secretary - Congressional and Legislative Affairs: Fiscal year 1974, $812,100; fiscal year 1975, $839,400; increase, $27,300. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+15,000	--	$839,400	40	Additional funding for current staff support.
(2)	+12,300	--	---	--	Pay cost annualization.
	+27,300	--			

Cost Factors Involved in Increases

(1) $10,000 for within-grade step increases; $5,000 for increased printing costs.

(2) Annualization of the pay increase effective 10/14/73.

The Assistant Secretary - Congressional and Legislative Affairs discharges the duties of the Secretary with the authority and direct responsibility for programs associated with Congressional legislative and liaison activities.

Office of Congressional Liaison - is the principal liaison between the Department and the Committees and individual members of Congress. It communicates the policies and positions of the Department and the viewpoints of the Secretary regarding Congressional issues, and programs and matters of interest to the Department as requested by members of Congress.

In addition, the office coordinates and handles a variety of requests from members of Congress relating to special interests of their constituents, expediting communications, special inquiries and requests for information or publications, employment inquiries, and the timely dispatch of Departmental press releases.

Office of Legislation - is responsible for the unification and coordination of the Department's legislative program and its presentation to the Office of Management and Budget and the Congress. The office consults with the Secretarial offices, the Solicitor, and bureau officials in the determination of policy incident to proposed or pending legislation of importance and with respect to policy involved in reports on legislation or recommendations for Presidential approval or veto of enrolled bills.

In addition, the office reviews all legislative documents submitted by the bureaus and offices, prepares coordinated reports, and coordinates and arranges departmental representation at Congressional hearings, including participation in preparation of witness statements. It is responsible for establishing and maintaining contacts on legislative matters with the Congress and executive agencies; for providing legislative information for use within the Department, such as advance notice of hearings and status reporting on pending legislation; and for providing a clearinghouse on legislative matters.

An increase of $27,300 is requested for fiscal year 1975. $10,000 is needed for within-grade step increase costs and $5,000 for other office support costs associated with printing and purchasing copies of enrolled bills, legislative proposals, hearing records, etc. The remaining $12,300 is needed for annualization of the October 14, 1973 pay increase.

(h) Assistant Secretary - Program Development and Budget: Fiscal year 1974, $2,154,000; fiscal year 1975, $2,530,300; increase, $376,300. The increase consists of:

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	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+315,100	12	$2,530,300	81	Two positions for Indian and Territorial Program Development. Five positions for the Office of Policy Analysis. Five positions for the Office of Environmental Project Review.
(2)	+34,100	--	---	--	Within-grade step increase costs and reduction of lapses.
(3)	+27,100	--	---	--	Pay cost annualization.
	+376,300	12			

Cost Factors Involved in Increases

(1) Twelve man-years of employment consisting of $260,000 for salaries and benefits and $55,100 for travel and other support costs.

(2) One additional man-year of employment, $20,000 and within-grade step increase costs, $14,100.

(3) Annualization of the October 1973 pay increase.

The Assistant Secretary - Program Development and Budget conducts a continuing evaluation of budget and policy matters through the systematic review of bureau and office policy, program, budget and legislative initiatives presented by the respective Assistant Secretaries. He is responsible for advising the Secretary on these programs which demand Secretarial attention because of their national concern, legislative requirements, precedent setting nature, or because the issues and activities involved cross bureau or office lines (such as, outer continental shelf leasing, geothermal development, oil shale, energy matters, etc.). He is responsible for following through to assure appropriate implementation of agreed-to policy. The office is responsible for the Department's budget process and Departmental compliance with the National Environmental Policy Act. The Alaska Native Claims Settlement Act Study, required by the Alaska Native Claims Settlement Act, is also the responsibility of the Assistant Secretary for Program Development and Budget.

Immediate Office - Program increase, $73,000 and two positions. The Immediate Office of the Assistant Secretary - Program Development and Budget provides Secretarial direction and supervision over the Office of Budget, Office of Policy Analysis, and the Office of Environmental Project Review.

Within the Assistant Secretary's immediate office, we propose to establish a small staff of two professionals to be responsible for program development and policy matters relating to Trust Territories and Indian affairs. This aspect of oversight has been accomplished in the past by details from the Bureau of Indian Affairs and Office of Territories on an as required basis. The establishment of a permanent element for this critical area of departmental oversight we now see to be mandatory.

Office of Policy Analysis - Program increase, $121,100 and five positions. This office provides organizational, economic, evaluative and legislative analysis of Departmental programs and issues in support of development of new programs, modification of existing programs, and development of the Department's budget and legislative plan. It provides policy analysis for Secretarial guidance to bureaus and offices, develops options and issues analyses, and coordinates with the Office of Budget in execution of Departmental policies through budget formulation and execution.

In prior years when this office was called Program Development and Coordination, it has primarily coordinative and interagency responsibilities. It is now being redirected to more substantive program and policy analysis, and the functions of the former Office of Economic Analysis are now being transferred to it. We are requesting five additional positions for fiscal year 1975 required to carry out added duties of the office.

Program analysts, specialized by bureau and office areas, will assume responsibility for program development, monitoring, and evaluation on a detailed basis, assisting in formation of the Department's budget and legislative plan.

Environmental Project Review - Program increase, $121,000 and five positions. The Office of Environmental Project Review provides Departmentwide management, coordination, and quality control of all environmental statements prepared within the Department of the Interior or submitted to it for review by other Federal agencies. The staff coordinates and establishes overall policy and guidance for the preparation and review of all environmental statements under consideration by the Department. The staff is composed of professionals from various natural resources and environmental disciplines. The principal function of the staff is to review the environmental impacts of proposed actions to insure that the full and balanced interests of the Department are considered, and to provide guidance to the bureaus and offices in meeting the Department's responsibilities under the National Environmental Policy Act of 1969 and Executive Orders 11507 and 11514.

In fiscal year 1973, the Department prepared 84 draft and 55 final environmental statements. Major prime areas of responsibility for Interior include such activities as public lands management, park and wilderness proposals, water resources projects, powerplants and energy proposals, and fish and wildlife management. In fiscal year 1974 the Department expects to prepare 150 draft and 200 final statements.

In addition the office is charged with the coordination and preparation of the Department's review comments on proposed projects and environmental statements filed by other Federal agencies. The Department is called upon to review virtually all such statements prepared by other agencies based upon its wide expertise in natural resources and cultural matters. In fiscal year 1973 the Department reviewed about 1,555 draft statements and expects in fiscal year 1974 to review about 2,000 statements from such agencies as the Atomic Energy Commission, Environmental Protection Agency, Corps of Engineers, Department of Agriculture, and Department of Transportation.

It is proposed in fiscal year 1975 to increase the Office of Environmental Project Review by five positions. The present heavy workload in the review of transportation projects can only be met by two additional professional positions to accomplish this need. The remaining three requested positions are to be one professional and two secretarial to meet increasing workloads and to allow the office more opportunity to review intradepartmental environmental policies and procedures in order to meet environmental responsibilities.

Office of Budget - The Office of Budget has the primary staff responsibility in the Department for budgeting and related financial administration. The Office of Budget develops overall Departmental policy and procedures and provides Departmental direction, review and coordination for all phases of the budget process. It is the Department's budgetary and financial liaison on appropriations and funds matters with the Office of Management and Budget, the Appropriations Committees of the Congress, the Treasury Department and others. The office reviews the content of all budgetary material, including proposals for supplementary budget requests and for reprogramming of funds, and fiscal and financial reports. It also maintains control of the limitations imposed by the Congress and by the Office of Management and Budget on the funds appropriated and the positions allotted to the Department. During the current fiscal year three positions and related funding were reassigned from the Office of Budget to the Office of Policy Analysis.

Alaska Section "2c" Study - The Alaska Native Claims Settlement Act (P.L. 92-203. approved 12/18/71) authorizes and directs the Secretary of Interior "together with other appropriate agencies of the United States Government, to make a study of all Federal programs primarily designed to benefit Native people and to report back to Congress with his recommendations for the future management and operation of these programs within three years of the date of the enactment of this Act."

The Congress, in enacting the Alaska Native Claims Settlement Act, recognized that its financial and real estate provisions would have an all pervasive effect upon the Alaska Native Community. It establishes regional native corporations to manage assets, it changes the Native land holding patterns; and it provides nearly one billion dollars in cash settlement which may be used for Native economic development and other purposes. In this light the Congress wanted an analysis of what effect changes should have upon the substantial Federal assistance now being provided to Alaska Natives, primarily through the Bureau of Indian Affairs and HEW's Indian Health Services. Additionally, the Alaska pipeline will have a substantial economic impact upon the Native communities through employment and royalty payments.

Included in the fiscal year 1974 supplemental appropriation was $365,000 to initiate and fund the study through the end of the fiscal year (half year costs). This amount is included in our fiscal year 1975 base requirements to assure sufficient funding to complete the study and forward it to the Congress by December 18, 1974.

General Increases - General increases of $61,200 are requested for fiscal year 1975. These increases include $27,100 for annualization of the October 1973 pay increase and $34,100 for salaries and benefits occasioned by within-grade step increases and reduction of lapses.

Assistant Secretary - Program Development and Budget

Listing of Funds and Positions for Fiscal Year 1974 and 1975 and Distribution of Increases

	F.Y. 1974 Base		Pay Cost Supplemental Annualization	Current Staff Support	Program Increases		Total Increases	F.Y. 1975 Estimate	
	Funds	Positions			Funds	Positions		Funds	Positions
Immediate Office.....	$235,800	9	$3,900	$4,500	$73,000	2	$81,400	$317,200	11
Office of Policy Analysis.....	695,600	26	10,100	12,800	121,100	5	144,000	839,600	31
Environmental Project Review..	401,900	17	6,600	8,400	121,000	5	136,000	537,900	22
Office of Budget.....	455,700	17	6,500	8,400	---	--	14,900	470,600	17
Alaska Section "2c" Study.....	365,000	--	---	---	---	--	---	365,000	--
Total.....	2,154,000	69	27,100	34,100	315,100	12	376,300	2,530,300	81

2. PROGRAM DIRECTION AND COORDINATION

Analysis by Subactivities

Subactivity	F.Y. 1973 Amount Available	F.Y. 1974 Total Appropriation	F.Y. 1974 Pay Cost Supplemental	F.Y. 1974 Transfers	F.Y. 1974 Amount Available
(a) Asst. Secy. - Energy and Minerals, Immed. Office....	$ 811,793	$ 713,800	$ 65,000	$ ---	$ 778,800
(b) Research and Development....	56,977	587,500	---	---	587,500
(c) Energy Conservation.....	67,730	5,900,000	---	---	5,900,000
(d) Energy Data and Analysis....	---	2,400,000	---	---	2,400,000
(e) Asst. Secy. - Land and Water Resources.....	652,085	647,100	57,100	---	704,200
(f) Asst. Secy. - Fish and Wildlife and Parks.....	387,777	382,800	32,500	---	415,300
(g) Office of Territorial Affairs.....	378,228	366,000	30,500	---	396,500
(h) Office of Indian Affairs....	220,266	217,500	19,500	---	237,000
Total.....	2,574,856	11,214,700	204,600	---	11,419,300

2. PROGRAM DIRECTION AND COORDINATION

Analysis by Subactivites

Subactivity	F.Y. 1973 Amount Available	F.Y. 1974 Adjusted Amt. Available	F.Y 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974 Total
(a) Asst. Secy. - Energy and Minerals, Immed. Office.....	$ 811,793	$ 778,800	$ 804,800	$ +26,000
(b) Research and Development.....	56,977	587,500	---	-587,500
(c) Energy Conservation.....	67,730	5,900,000	---	-5,900,000
(d) Energy Data and Analysis.....	---	2,400,000	---	-2,400,000
(e) Asst. Secy. - Land and Water Resources.....	652,085	704,200	823,300	+119,100
(f) Asst. Secy. - Fish and Wildlife and Parks.....	387,777	415,300	429,900	+14,600
(g) Office of Territorial Affairs.....	378,228	396,500	410,300	+13,800
(h) Office of Indian Affairs.....	220,266	237,000	245,500	+8,500
Total.....	2,574,856	11,419,300	2,713,800	-8,705,500

2. PROGRAM DIRECTION AND COORDINATION

(a) Assistant Secretary - Energy and Minerals: Fiscal year 1974, $778,800; fiscal year 1975, $804,800; increase $26,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$12,300	--	$804,800	30	Additional funding for current staff support.
(2)	13,700	--	---	--	Pay Cost annualization.
	26,000	--			

Cost Factors Involved in Increases

(1) $8,400 for within-grade step increases, $1,500 for travel, $200 for communications, and $2,200 for other services.

(2) Annualization of the pay increase effective 10/14/73.

The Assistant Secretary - Energy and Minerals discharges the duties of the Secretary with the authority and direct responsibility for programs associated with mineral data and analysis; generation, transmission and marketing of electric power except for those functions performed by the Bureau of Reclamation; mine health, safety and training programs; topographic, geologic and mineral resources matters; energy, metallurgical and mining research and development; and emergency preparedness and natural disaster energy and minerals functions. Activities associated with the Office of Energy Conservation, the Office of Energy Data and Analysis, the Office of Oil and Gas, and the Office of Petroleum Allocation are scheduled to be transferred to the Federal Energy Administration upon enactment of pending legislation.

The Assistant Secretary - Energy and Minerals exercises Secretarial direction over the following organizations: U.S. Geological Survey, U.S. Bureau of Mines, Mining Enforcement and Safety Administration, Office of Coal Research, Office of Research and Development, Bonneville Power Administration, Southwestern Power Administration, Southeastern Power Administration, and Alaska Power Administration.

In addition to the on-going programs of these bureaus, this Assistant Secretariat is responsible for overall coordination of Interior's portion of the Energy R&D program. This will entail the development of R&D programs for mining research, coal conversion and utilization, mining Health and Safety Research, electric power transmission (both AC and DC, aboveground and underground) exploration, geothermal, uranium, and environmental and systems studies. These additional programs are part of the $10 billion Energy Research and Development program proposed by the President. A large percentage of Interior's $549 million first year funding of the Energy R&D program will be performed by the bureaus reporting to the Assistant Secretary - Energy and Minerals.

The developing energy crisis pointed up that it is possible for a very few countries to control the price and supply of petroleum. In a like manner, it has been suggested that some critical non-fuel minerals could be controlled by a small number of producing countries. Accordingly, the Assistant Secretary - Energy and Minerals is reviewing the Department's mineral data collection and analysis operation with the aim of improving our capability to accurately forecast mineral trends and supply problems.

The $26,000 increase will provide additional support to the development of new program initiatives, and policy direction to the ongoing programs.

(b) Office of Research and Development: Fiscal year 1974, $587,500; fiscal year 1975, -0-; decrease, $587,500. The decrease consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$-587,500	-10	---	--	Change in funding source.

The Office of Research and Development is under the supervision of the Assistant Secretary - Energy and Minerals. Funding for this office is included under the appropriation "Departmental Operations" for fiscal year 1975.

(c) Office of Energy Conservation: Fiscal year 1974, $5,900,000; fiscal year 1975, -0-; decrease, $5,900,000. The decrease consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$-5,900,000	-39	---	--	Change in funding source.

The Office of Energy Conservation is scheduled to be transferred to the Federal Energy Administration upon enactment of pending legislation. Funding for this office is included under the proposed appropriation "Energy Conservation and Analysis" for fiscal year 1975.

(d) Office of Energy Data and Analysis: Fiscal year 1974, $2,400,000; fiscal year 1975, -0-; decrease, $2,400,000. The decrease consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$-2,400,000	-30	---	--	Change in funding source.

The Office of Energy Data and Analysis is scheduled to be transferred to the Federal Energy Administration upon enactment of pending legislation. Funding for this office is included under the proposed appropriation "Energy Conservation and Analysis" for fiscal year 1975.

(e) Assistant Secretary - Land and Water Resources: Fiscal year 1974, $450,500; fiscal year 1975, $565,600; increase, $115,100. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+8,300	--	---	--	Additional funding for current staff support.
(2)	+8,100	--	---	--	Pay cost annualization.
(3)	+98,700	+4	$565,600	21	Increased staff support.
	+115,100	+4			

Cost Factors Involved in Increases

(1) $6,700 for within-grade step increases, $900 for travel and $700 for printing.

(2) Annualization of the pay increase effective 10/14/73.

(3) Four man-years of staff support averaging $24,675.

The Immediate Office of the Assistant Secretary - Land and Water Resources discharges the duties of the Secretary with respect to the management and development of land and water resources. The Assistant Secretary exercises Secretarial direction and supervision over the Department's Saline Water program, the Office of Water Resources Research, the Office of Land Use and Water Planning, the Bureau of Reclamation, and the Bureau of Land Management. He also is responsible for developing and maintaining emergency plans to meet military and essential civilian requirements as they relate to water resources.

In addition to the overall supervision and policy direction of the various bureaus and offices reporting to the Assistant Secretary - Land and Water Resources, the personnel of this office are engaged in planning actions for new legislative proposals including deep water ports, land use and water planning, area resources task forces, other policy issues, and environmental analysis.

An increase of $98,700 and four positions is requested for fiscal year 1975 to assist the Assistant Secretary in meeting Departmental priority demands for accelerated gas, coal, geothermal, and oil shale leasing; environmental actions; and to assist in the direction and supervision of programs affecting the Nation's land and water resources. In addition, $8,300 is requested to cover such costs as within-grade step increases and other costs associated with maintaining current program levels, and $8,100 for the annualization of the October pay increase.

(e-1) Office of Land Use and Water Planning: Fiscal year 1974, $253,700; fiscal year 1975, $257,700; increase, $4,000. The increase consists of:

Increase (+) or Decrease (-)		Total	Total	
Amount	Positions	Program	Positions	Explanation
$+4,000	--	$257,700	9	Pay cost annualization

Cost Factors Involved in Increases

Annualization of the pay increase effective 10/14/73.

The Office of Land Use and Water Planning assists in identifying Departmental planning priorities and for initiating actions to satisfy these priorities. These priorities relate to the Department's activities in land, water and other natural resource planning and management. Special emphasis is placed on cooperation with and assistance to state and local governments and regional planning and development authorities.

The Office has primary staff responsibility for (1) preparation of and carrying out the Departmental strategy for implementing the proposed National Land Use Policy and Planning Assistance Act and other legislation related to land use planning; (2) policy development and interagency coordination on use of public land and water resources; (3) liaison with the Water Resources Council including the Secretary's position as Chairman of the Council, River Basin Planning, National Water Resources Assessment and Principles and Standards for Water and Related Land Resources; (4) interagency coordination with State and other Federal land use and water planning agencies; (5) Departmental position and programs concerning land use for the Federal Regional Councils; and (6) policy assistance for the Resources and Land Information System.

(f) Assistant Secretary for Fish and Wildlife and Parks: Fiscal year 1974, $415,300; fiscal year 1975, $429,900; increase, $14,600. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+7,700	--	$429,900	17	Additional funding for current staff support.
(2) +6,900	--	---	--	Pay cost annualization.
14,600	--			

Cost Factors Involved in Increases

(1) $6,700 for within-grade step increases and $1,000 for travel.

(2) Annualization of the pay increase effective 10/14/73.

The Assistant Secretary for Fish and Wildlife and Parks discharges the duties of the Secretary with respect to the development, conservation, and utilization of fish, wildlife, recreation, historical and national park system resources of the Nation. He exercises secretarial direction over the Bureau of Sport Fisheries and Wildlife, the National Park Service and the Bureau of Outdoor Recreation.

During recent years the programs in the conservation and use of natural resources have expanded greatly. Of particular importance are new or expanded programs in environment abatement and the protection of estuarine areas, endangered species, and parks and recreational opportunities.

An increase of $14,600 is requested for fiscal year 1975. This amount is for within-grade step increases, pay cost annualization, and other costs associated with maintaining the current level of support for this office.

(g) Office of Territorial Affairs: Fiscal year 1974, $396,500; fiscal year 1975, $410,300; increase, $13,800. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+7,300	--	$410,300	13	Increased costs for communications with the Territorial governments.
(2) +6,500	--	---	--	Pay cost annualization.
+13,800	--			

Cost Factors Involved in Increases

(1) Increased cost of providing dependable and secure telex communications with Territorial governments.

(2) Annualization of the pay increase effective 10/14/73.

The responsibilities for the overall general administration of the U.S. Territories and the Trust Territory of the Pacific Islands were assigned under the general

reorganization of the Department of the Interior on May 7, 1973, to the newly established Office of Territorial Affairs. Previously this function and resources had been under the now abolished Assistant Secretary - Public Land Management. The major objective of this change was to upgrade the status of the activity with the Director reporting to the Secretary. This office will continue to provide direct, professional assistance to the territorial administrators to foster local economic and natural resources development; provide improved health, education, and general services to its citizenry; and help develop viable local government administrations. This technical staff consisting of specialists in educational development, economic development and environmental affairs, political and legislative affairs, program development, and territorial governmental operations will work directly with the territorial administrators with much of their time being spent in the territories themselves.

The proposed fiscal year 1975 increase of $7,300 is needed to support fast, dependable, secure telex communications between Saipan and Washington and Washington and American Samoa. Currently communication services are handled over military circuits which often defer Interior material as well as prevent the maintaining of confidentiality in transmission due to military routing procedures. This amount will provide about three hours of messages per month. Non confidential messages will continue to be transmitted via military circuits. The remaining $6,500 is for annualization of the October 14, 1973 pay increase.

(h) Office of Indian Affairs:- Fiscal Year 1974, $237,000; fiscal year 1975, $245,500; increase, $8,500. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+4,400	--	$245,500	8	Additional funding for current staff support.
(2)	+4,100	--	---	--	Pay cost annualization.
	+8,500	--			

Cost Factors Involved In Increases

(1) $3,700 for within-grade step increases and $700 for travel.

(2) Annualization of the pay increase effective 10/14/73.

The Office of Indian Affairs includes those resources allocated for the supervision and direction of the Bureau of Indian Affairs that were previously included under the Assistant Secretary - Public Land Management. Legislation has been introduced to establish an Assistant Secretary for Indian Affairs.

3. ADMINISTRATIVE MANAGEMENT

Analysis by Subactivities

Subactivity	F.Y. 1973 Amount Available	F.Y. 1974 Total Appropriation	F.Y. 1974 Pay Cost Supplemental	F.Y. 1974 Transfers 1/	F.Y. 1974 Adjusted Amount Available
(a) Asst. Secy. - Management.....	$ 193,935	$ 193,300	$ 14,200	$ ---	$ 207,500
( ) International Activities.....	161,981	156,900	---	-156,900	---
( ) Accounting Management Policy.	132,002	131,000	---	-131,000	---
(b) ADP Systems Management.....	---	---	16,300	+189,000	205,300
(c) Secretarial Operations.....	605,711	607,300	49,500	+28,000	684,800
(d) Audit and Investigations.....	2,735,491	2,805,800	182,800	-109,600	2,879,000
(e) Management Operations.....	935,566	955,300	53,100	-229,500	778,900
(f) Management Consulting.....	668,131	681,900	34,400	-189,000	527,300
(g) Personnel Management.....	657,745	662,400	46,600	-76,200	632,800
(h) Management Services.....	---	---	34,200	+422,300	456,500
Total.....	6,090,562	6,193,900	431,100	-252,900	6,372,100

1/ Administrative realignment of organizational roles and responsibilities are fully explained in the following justification material.

3. ADMINISTRATIVE MANAGEMENT

Analysis by Subactivities

Subactivity	F.Y. 1973 Amount Available	F.Y. 1974 Adjusted Amt. Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974 Total
(a) Asst. Secy. - Management.....	$ 193,935	$ 207,500	$ 214,400	$ +6,900
( ) International Activities.....	161,981	---	---	---
( ) Accounting Management Policy.	132,002	---	---	---
(b) ADP Systems Management.....	---	205,300	261,900	+56,600
(c) Secretarial Operations.....	605,711	684,800	804,800	+120,000
(d) Audit and Investigations.....	2,735,491	2,879,000	2,972,900	+93,900
(e) Management Operations.....	935,566	778,900	806,300	+27,400
(f) Management Consulting.....	668,131	527,300	543,000	+15,700
(g) Personnel Management.....	657,745	632,800	714,300	+81,500
(h) Management Services.....	---	456,500	641,700	+185,200
Total.....	6,090,562	6,372,100	6,959,300	587,200

3. ADMINISTRATIVE MANAGEMENT

(a) Assistant Secretary - Management: Fiscal year 1974, $207,500, fiscal year 1975, $214,400; increase, $6,900. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$+6,900	--	$214,400	7	Additional funding for current staff support.

Cost Factors Involved in Increase

$2,700 for within-grade step increases, $100 for printing, $1,100 for other services; $3,000 for annualization of the pay increase effective 10/14/73.

The Office of the Assistant Secretary - Management discharges the duties of the Secretary with respect to the administrative management functions of the Department. Overall program direction and coordination is provided by this Office for seven specialized staff organizations which operate with Departmentwide scope and responsibilities. These special activities include internal audit and investigations, management services, ADP systems development, management and organizational surveys, personnel management, general administrative services, and library services. In addition this Assistant Secretary is responsible for the personnel, accounting, and budgetary services for the Office of the Secretary.

(b) Office of ADP Systems Management: Fiscal year 1974, $205,300; fiscal year 1975, $261,900; increase, $56,600. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+6,600	--	$211,900	7	Additional funding for current staff support.
(2)	+50,000	--	50,000	--	Computer services.
	+56,000	--			

Cost Factors Involved in Increases

(1) $3,800 for within-grade step increases, and $2,800 for annualization of the pay increase effective 10/14/73.

(2) Computer services to develop and test proposed ADP Programs.

As a result of the increasing dependency and expenditures on ADP within the Department, the Office of ADP Systems Management was established to provide overall management in the use of information system technology throughout the Department.

Funding and positions for this program had previously been included under the Office of Management Consulting.

The Office of ADP Systems management is responsible for establishing overall plans, policy and criteria for the acquisition, use and management of automatic data processing (ADP) throughout the Department. Specific functions of this office include:

- Providing departmental policy for development of ADP based information systems and the acquisition and management of ADP resources.
- Developing and correlating ADP plans.
- Reviewing and coordinating Departmentwide ADP budgets.
- Approving ADP equipment, software and services, and procurement requests.
- Developing and promulgating ADP standards.
- Representing the Department with the Office of Management and Budget, General Services Administration and National Bureau of Standards on matters pertaining to ADP administration.

For fiscal year 1975 we are requesting an increase of $50,000 to provide funds for computer services necessary in the development, testing, and application of departmentwide ADP programs. Reductions in the fiscal year 1974 appropriation resulted in the elimination of contract funds needed to support this office. In addition, $6,600 is requested for within-grade step increase costs and other increased costs necessary to support a staff of 7 employees.

(c) Office of Secretarial Operations: Fiscal year 1974, $684,800; fiscal year 1975, $804,800; increase, $120,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+79,300	3	$373,700	19	Increased staff and additional support costs for the Division of Personnel Services.
(2)	+40,700	1	431,100	23	Increased staff and additional support costs for the Division of Fiscal Services.
	+120,000	4			

Cost Factors Involved in Increases

(1) Three additional man-years of employment @ $23,000; $5,500 for within-grade step increases and other costs associated with maintaining the current level of support; and $4,800 for annualization of the pay increase effective 10/14/73.

(2) One additional man-year of employment @ $22,000; $6,000 for additional ADP support; $6,700 for within-grade step increase and the costs associated with maintaining the current level of support; and $6,000 for annualization of the pay increase effective 10/14/73.

The Office of Secretarial Operations consists of the Division of Personnel Services and the Division of Fiscal Services which provide personnel, budgetary and financial services for the Office of the Secretary. In addition, the Office provides these services on a reimbursable basis, for the Office of the Solicitor, Coal Research, Office of Oil and Gas, Office of Petroleum Allocation, and the Office of Water Resources Research as well as five independent offices and commissions.

In recent years the funding and manpower increases necessary to adequately support these operations have not kept pace with increasing workload. In order to alleviate this problem we are requesting four additional positions and $91,000 to adequately

provide these mandatory services for the Secretariat. Three of these positions and $69,000 is requested for the Division of Personnel Services with the remaining position and $22,000 being requested by the Division of Fiscal Services. These additional positions are necessary to adequately support the current workload requirement.

(d) Office of Audit and Investigation: Fiscal year 1974, $2,879,000; fiscal year 1975, $2,972,900; increase, $93,900. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+55,100	--	$2,972,900	123	Additional funding for current staff support.
(2) +38,800	--	---	--	Annualization of fiscal year 1974 pay costs.
+93,900	--			

Cost Factors Involved in Increases

(1) Within-grade step increases, $26,200; contractual services, $14,000; travel and other support costs, $14,900.

(2) Annualization of fiscal year 1974 pay costs consisting of $37,300 for salaries and $1,500 for benefits.

The Office of Audit and Investigation is responsible for conducting the Department's audit and investigation activities.

Audit Activities - Develops and conducts the comprehensive plans for audit of the Department and its grantees and contractors. Audits are undertaken based on (1) priorities supportive of management objectives, requests of top Departmental officials, and requirements of laws and regulations; and (2) the need to periodically provide information on the effectiveness, efficiency and economy of operations and determine that operations are conducted in compliance with laws, regulations, and Departmental policies, and that funds are properly expended and accounted for. The dimension of this workload is illustrated by the following, and is substantially larger than Audit's capacity to perform.

- There are approximately 135 Departmental locations which maintain records, generate expenditures, or are accountable for Government property in a substantive degree.
- The Department has rate setting and collection responsibilities from sale of power, oil and gas leasing, grazing lands, Indian resources, timber sales and recreation fees. The receipts are approximately $1.6 billion a year.
- There are 106 Indian housing authorities.
- We are assigned cognizant Governmentwide audit responsibility for 10 educational institutions under the provisions of OMB Circular A-88. We also are responsible for audit of about 90 state and local government entities submitting cost allocation plans under the provisions of OMB Circular A-87.
- We also audit (1) grants or financial assistance to states under the provisions of the Johnson O'Malley Act, the National Historic Preservation Act, and the Federal Coal Mine Health and Safety Act, (2) grants and contracts to nongovernment entities, and (3) cost

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and pricing data submitted with contractor's proposal for negotiated contracts or amendments to fixed-price contracts involving more than $100,000.

During the fiscal year ended June 30, 1973, we issued 88 internal and 189 contract and grant audit reports. These audits were performed for 17 different Interior bureaus and offices and 18 other Federal agencies. In addition, three Federal agencies performed 263 contract and grant audits for the Department on a reimburseable basis, primarily under cognizance arrangements established by OMB Circular A-88.

A traditional means of measuring audit accomplishments is money saved. To date, contracting and grant officers have adopted $1 million of the $7 million in financial adjustments recommended by Audit in fiscal year 1973. Some of these recommendations have yet to be acted on, and undoubtedly the net savings will be appreciably larger. Adoption of fiscal year 1973 improvements in Departmental operations will produce additional measurable savings of almost $3 million. Audits of Departmental operations also produced many additional significant benefits by emphasizing improvements in systems and procedures which promote greater efficiency economy, and effectiveness. These improvements result in one-time savings or savings of a continuing nature which often are not fully or readily measurable in financial terms.

Investigations - Conducts investigations stemming from specific complaints of serious misconduct or operating irregularities or in other cases (as the Secretary may direct) in which a formal investigation requiring trained special agent techniques is considered appropriate. The number of investigative cases received has increased from 38 in fiscal year 1971 to 54 in fiscal year 1973, without an increase in staff. While improved productivity has helped to accommodate the larger workload, there is also a resultant lag in undertaking cases referred for investigation.

During the current fiscal year the Department's procurement policy and review efforts were reassigned from the Office of Audit and Investigation and established as a separate unit under the Office of Management Services. Accordingly, five positions and $109,600 was reassigned from this Office.

We are requesting $93,900 for increased costs to support the current staff. This increase includes $38,800 for annualization of fiscal year 1974 pay costs and $26,200 for within-grade step increases, $14,000 for contractual services associated with an increase in standard audit billing rates, and $14,900 for other office support costs.

(e) Office of Management Operations: Fiscal year 1974, $778,900; fiscal year 1975, $806,300; increase, $27,400. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+16,100	--	$806,300	48	Additional funding for current staff support.
(2)	+11,300	--	---	--	Pay cost annualization.
	+27,400	--			

Cost Factors Involved in Increases

(1) $10,000 for within-grade step increases and $6,100 for other miscellaneous support services.

(2) Annualization of the pay increase effective 10/14/73.

The Office of Management Operations has primary staff responsibility for all administrative services, communications, space management, security and protective services, and emergency preparedness activities at the Departmental level. It also provides certain centralized administrative services for bureau and office headquarters and other offices located in the Washington Metropolitan area. These services include space, duplicating, communications, visitor information, and storage and shipping. The office also provides such administrative services as mail, file, messenger, and procurement for the Office of the Secretary, the other Departmental Offices, and several independent offices and commissions.

An increase of $27,400 is requested to cover the added costs in fiscal year 1975 of providing these essential services.

During the current fiscal year the Department's correspondence control office was reassigned to the Office of the Under Secretary. In addition, records management and property management were reassigned to the Office of Management Services. Accordingly, an adjustment of 12 positions and $229,500 was made.

(f) Office of Management Consulting: Fiscal year 1974, $527,300; fiscal year 1975, $543,000; increase, $15,700. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+7,800	--	$543,000	20	Additional funding for current staff support.
(2)	+7,900	--	---	--	Pay cost annualization.
	+15,700	--			

Cost Factors Involved in Increases

(1) $4,200 for within-grade step increases and $3,600 for other miscellaneous support services.

(2) Annualization of the pay increase effective 10/14/73.

The Office of Management Consulting is responsible for providing highly qualified, objective and responsive general consulting services to the Department's management in order to promote more effective and efficient operations of the Department. Specific functions to be carried out by the office in fiscal year 1975 include the following:

- Conduct project-oriented management consulting studies throughout the Department related to financial management systems development and implementation, organization planning and analysis, staffing analysis, long-range management planning, management sciences, and analysis of administrative and paperwork operations.

- Monitor, coordinate and review management studies carried out by bureaus or offices, and develop a skilled Departmentwide management consulting workforce; promote improved management practices and organization throughout the Department.

- Effect administrative cost reductions in major department operations through operational reviews and the application of systems analysis, industrial engineering, and other quantitative analysis techniques.

- Exercise Departmental review and technical direction over the use of management consulting services from outside contractors.

- Provide for Secretarial delegations of authority, and Department-wide programs for management of directives, reports, and committee activities; and coordinate the implementation of Presidential Orders, Office of Management and Budget Circulars, and other agency directives.

- Provide for development of intergovernmental and interagency coordination policies and procedures for the Department.

- Represent the Department to the Office of Management and Budget, the Congress, and other Federal agencies, in matters pertaining to functions assigned to the office.

- Carry out a variety of special projects such as: performing analytical evaluations of the management aspects of major program or management policy issues; coordinating the management of inter - and intra-Departmental studies; and, exercising management oversight for new programs.

An increase of $15,700 is requested for pay cost annualization, within-grade step increases, and other support costs associated with maintaining current operations of the office.

During the current fiscal year the Department's ADP systems management effort was reassigned from under the supervision and direction of the Office of Management Consulting and established as a separate office reporting to the Assistant Secretary—Management. Accordingly 7 positions and $189,000 were reassigned from this office.

(g) Office of Organization and Personnel Management: Fiscal year 1974, $632,800, fiscal year 1975, $714,300; increase $81,500. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+58,000	+2	$ ---	--	Increased staffing requirements.
(2)	+ 9,900	--	---	--	Pay cost annualization.
(3)	+13,600	--	714,300	35	Additional funding for current staff support.
	+81,500	+2			

Cost Factors Involved in Increases

(1) Two additional professional positions @ $29,000.

(2) Annualization of the pay increase effective 10/14/73.

(3) $10,000 for within-grade step increases and reduction of lapses; travel, $1,000; other services, $2,000 and supplies, $600.

The Office of Organizational and Personnel Management is responsible for providing Departmental leadership and staff guidance in all matters pertaining to personnel and organization management and administration. Policies, standards, objectives and programs are designed to establish and maintain an adequate, highly qualified and efficient workforce for the accomplishment of the Department's programs. The Office gives direction and overall review to the constituent bureaus in the

Department with regard to their organization arrangements and personnel utilization through comprehensive and all inclusive personnel management programs, which include position management, position classification, labor management relations, employee conduct, wage and pay administration, employee and organization performance and work measurement, recruitment, placement, manpower planning, employee training and development, employee relation, employee health, occupational standards, personnel issuance systems, procedures and records. The office coordinates and evaluates bureau organization arrangements, personnel and organization and employee performance improvement programs, and provides Departmental leadership for executive development and training.

As a result of the realignment of organizational roles and responsibilities, the Division of Safety Management, consisting of three positions and $76,200 was reassigned to the Office of Management Services during the current fiscal year.

For fiscal year 1975, an increase of two positions and $58,000 is requested for the allocation and development of career executive resources. This program will provide the Department with the capability to better manage and train its executive resources. The small number of supergrades in the Department requires that they be used in programs that are of highest priority. This program will insure that as supergrades become vacant, they will be assigned to programs with the greatest need.

The Department's executive development program will insure the continuing development of executives and the preparation of managers for future executive level jobs. Additionally, the CSC and OMB has placed requirements on the Department to initiate and carry out an executive development program.

In addition an increase of $23,500 is requested for pay cost annualization, within-grade step increases, and other support costs associated with maintaining current operations of the office.

(h) Office of Management Services: Fiscal year 1974, $456,500; fiscal year 1975, $641,700; increase, $185,200. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+172,000	+6	$ ---	--	Additional staff for the Office of Management Services.
(2)	+13,200	--	641,700	24	Additional funding for current staff support and pay cost annualization.
	+185,200	+6			

Cost Factors Involved in Increases

(1) a. One position and $30,100 for procurement policy and review.

b. One position and $52,800 for safety management.

c. Three positions and $56,500 for records management.

d. One position and $32,600 for property management.

(2) $13,200 for pay cost annualization, within-grade step increases, and other support costs associated with maintaining the current level of office support.

The Office of Management Services is composed of the following functions that were previously included in other major activities of the Secretary's budget.

Function	Previous Location
Procurement Policy and Review	Audit and Investigations
Safety Management	Personnel Management
Records Management	Management Operations
Property Management	Management Operations

Funding and position levels for these functions are as follows:

Function	F.Y. 1974 Funds	F.Y. 1974 Positions	F.Y. 1975 Funds	F.Y. 1975 Positions	Requested Increase Funds	Requested Increase Positions
(1) Office of the Director...	$51,200	2	$52,600	2	$1,400	--
(2) Procurement Policy and Review.....	151,900	6	186,400	7	34,500	1
(3) Safety Management.....	82,300	3	137,300	4	55,000	1
(4) Records Management.....	52,800	2	111,300	5	58,500	3
(5) Property Management.....	118,300	5	154,100	6	35,800	1
Total.....	456,500	18	641,700	24	185,200	6

(1) Office of the Director - The Office of the Director provides overall direction and supervision over this office's numerous and diverse responsibilities. The increase of $1,400 will be needed for pay cost annualization and within-grade step increase costs.

(2) Procurement Policy and Review - The Division of Procurement Policy and Review is responsible for the proper and effective conduct of all procurement and grants activity within the Department. In this role the Division is the principal advisor to the Secretariat and the bureaus and offices on all matters, both policy and operational, related to procurement and grants. Also, the Division is responsible for developing, implementing, modifying, reviewing and monitoring procedures, regulations, and operations applicable to all procurement and grant activities. The Division also represents the Department on inter-governmental committees in the development of Governmentwide policy related to procurement and grants.

The diversity of programs and the multiple management within the Department requires a strong capability at the Secretarial level to assure consistency of procurement policy and of procurement and grant practices within the Department. An increase of one professional and $30,100 is requested to handle this increasing workload. In addition $4,400 is requested for pay cost annualization within-grade step increases, and other costs associated with maintaining the current level of staff support.

(3) Safety Management - The Division of Safety Management is responsible for the Department's effort to prevent injuries to its employees, to protect its property from damage, and to provide for the safety of the public in connection with its operations and facilities. Over the past several years additional workload requirements have surpassed available resources occasioned by:

- Executive Order 11612 which affects the occupational safety and health programs for Federal employees.
- The Occupational Safety and Health Act of 1970 which affected contract employees performing services for the Department.
- The Highway Safety Act of 1973 which affected the construction, operation and maintenance of the Department's roadways.

In addition, the Division operates a Departmentwide computer information retrieval

system. This system provides selected statistical information on accidents by cause, type, monitary loss, etc. and eliminates most of the need for bureau personnel to maintain individual safety records.

In order for the Department to cope with these mandatory requirements we are requesting an additional position and $25,000 in fiscal year 1975. In addition, we are requesting $27,800 to update and expand this ADP system to provide the full range of required safety statistical information and eliminate duplication of effort at the Bureau level in operating this program. The remaining $2,200 is needed for pay cost annualization, within-grade step increases and other costs associated with maintaining the current level of staff support.

(4) Records Management - The Division of Records Management is responsible for, in compliance with the Federal Records Act of 1950, establishing and maintaining an active continuing program for the economical and efficient management of the Department's records. A recent National Archives and Records Service (NARS) inspection found the Department's overall program lacking with little evidence of management support directed toward attaining goals that would result in improved efficiency and economy. Departmental records holdings have increased to over 500,000 cubic feet in current office space with an additional 184,000 cubic feet stored at the Federal Records Center. NARS estimates the annual cost of creating, maintaining, using, and disposing of paperwork Departmentwide exceed $47 million.

Currently the Department has two positions devoted to this program. For fiscal year 1975 we are requesting three additional positions and $56,500 to develop and implement Department policy and uniform procedures for the improvement of correspondence, forms, mail, files, maintenance and disposition, records, scheduling microfilming, and related records management activities.

The remaining $2,000 is needed for pay cost annualization, within-grade step increases and other costs associated with maintaining the current level of staff support.

(5) Property Management - The Division of Property Management is responsible for the formulation of Departmental policies, standards, and objectives; the provision of staff guidance and direction; and the review and evaluation of the effectiveness of Bureau procedures with respect to:

- Acquisition, utilization, maintenance, and disposition of all real and personal property except unreserved public domain lands and lands reserved or dedicated for national parks.
- Procurement of equipment, materials, and supplies from established sources of supply such as Federal Supply Schedules, GSA stores stock, and other GSA procurement programs.
- Acquisition, utilization, and assignment of employee housing and the establishment of rental rates therefore, including charges for utilities and furnishings.
- Coordination of the program for the prevention, control, and abatement of air and water pollution from Interior installations.
- Implementation and administration of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

We are requesting one additional professional level position and $32,600 to carry out these responsibilities. This individual would assist in all functions but would have primary responsibility for the Department's activities under the Uniform

Relocation Assistance Act in achieving greater uniformity among Interior bureaus in the implementation of the act and between the regulations of this Department and other Federal agencies.

The remaining $3,200 is needed for pay cost annualization, within-grade step increases, and other costs associated with maintaining the current level of staff support.

4. GENERAL SERVICES

Analysis by Activities

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
Total.....	$260,198	$317,700	$2,144,000	$+1,826,300

General Services: Fiscal year 1974, $317,700; fiscal year 1975, $2,144,000; increase, $1,826,300. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$+1,826,300	--	$2,144,000	--	Increased costs of FTS, postage, space and commercial services required by the Office of the Secretary.

Cost Factors Involved in Increases

(1) $1,725,000, reimbursement for space services and facilities provided by GSA in accordance to Public Buildings Amendments of 1972, P.L. 92-313. $1,673,000 for base space cost and $52,000 for program expansion.

(2) $5,500 for employee compensation payments, $79,000 for FTS costs, $5,000 for increased costs of printing and $11,800 for postage, commercial telephone and rental fees.

The activity "General Services" covers general expense items which are not practicable to distribute to the various activities of the Office of the Secretary. These items consists of:

Space costs payable to GSA
General printing costs
Communications, including regular telephone costs (except field offices); FTS, commercial long distance, telegraph, and postage
Congressional travel for review of estimate in the field
Share of health service costs, stores and shipping costs, and other miscellaneous costs prorated over the Department
Operation of motor vehicles used by the Secretary and others in the Office of the Secretary

Some general purchases of equipment
Other miscellaneous expenses of a general nature
Employees compensation costs

Shown below is an itemization by object class of the funds requested for general services:

	1974 Estimate	1975 Estimate	Increase
12. Personnel benefits.....	$21,500	$27,000	$+5,500
21. Travel and transportation of persons.....	6,000	6,000	---
23. Rent, communications, and utilities.....	180,200	1,996,000	+1,815,800
24. Printing and reproduction....	20,000	25,000	+5,000
25. Other services.....	76,000	76,000	---
26. Supplies and materials.....	7,000	7,000	---
31. Equipment.....	7,000	7,000	---
Total.....	317,700	2,144,000	+1,826,300

The increase reflects the current level of costs for those general expense activities which are not feasible to distribute to the various operating units within the Office of the Secretary.

PERSONNEL SUMMARY

	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions.....	683	752	701
Full-time equivalent of other positions...	22	25	25
Average paid employment.....	630	708	700
Average GS grade.....	10.2	10.4	10.4
Average GS salary.....	$17,074	$18,138	$18,290
Average salary of ungraded positions.....	$10,110	$10,681	$10,681

ITEMIZATION OF ESTIMATE

Appropriation Title: Salaries and Expenses — Office of the Secretary

	1973 Actual	1974 Estimate	1975 Estimate	Increase (+) or Decrease (-)
Program and Financing:				
Total direct obligations.....	$14,875,107	$25,512,738	$20,047,000	$-5,465,738
Unobligated balance lapsing..	378,291	---	---	---
Budget authority.....	15,253,398	25,512,738	20,047,000	-5,465,738
Budget Authority:				
Appropriation.....	15,295,100	24,455,000	20,047,000	-4,408,000
Proposed supplemental for pay increases.....	---	1,100,000	---	-1,100,000
Transferred to other accounts	-41,702	-42,262	---	+42,262
Appropriation (adjusted)	15,253,398	25,512,738	20,047,000	-5,465,738
Object Classification:				
11 Personnel compensation....	11,078,624	13,835,100	13,807,100	-28,000
12 Personnel benefits.....	962,464	1,198,800	1,189,700	-9,100
13 Benefits for former personnel.....	11,967	---	---	---
21 Travel and transportation of persons.....	1,101,330	1,210,100	1,194,900	-15,200
22 Transportation of things..	16,597	64,600	51,600	-13,000
23 Rents, communications and utilities.....	375,589	516,738	2,306,200	1,789,462
24 Printing and reproduction	245,407	242,100	223,300	-18,800
25 Other services.....	783,632	8,027,800	919,000	-7,108,800
26 Supplies and materials...	121,304	188,200	176,300	-11,900
31 Equipment.....	178,193	229,300	178,900	-50,400
Total Obligations.....	14,875,107	25,512,738	20,047,000	-5,465,738

SALRIES AND EXPENSES

ESTIMATED OBLIGATIONS BY SUBACTIVITY AND OBJECT CLASS, FISCAL YEARS 1974 and 1975

Activity/Subactivity	Fiscal Year	Personnel Compensation	Personnel Benefits	Travel	Trans-portation of Things	Rent, Com. & Utilities	Print-ing & Reprod.	Other Services	Supplies and Materials	Equip-ment	Total	Posi-tions
1. Departmental Direction:												
(a) Office of the Secretary.....	1974	$ 463,600	$ 38,700	$ 33,500	$ 1,000	$ 8,900	$ 19,600	$ 16,000	$ 6,600	$ 6,000	$ 593,900	17
	1975	480,600	39,600	34,000	1,000	10,000	19,600	16,000	6,600	6,000	613,400	17
(b) Office of the Under Secretary.	1974	411,200	35,300	21,900	---	7,300	6,100	16,100	4,700	7,500	510,100	22
	1975	423,400	35,900	23,000	---	7,500	6,100	16,100	4,700	7,500	524,200	22
(c) International Activities.....	1974	143,100	16,800	2,000	---	1,000	1,000	3,000	1,000	1,000	168,900	6
	1975	193,000	20,100	4,000	---	2,000	1,000	3,000	1,500	1,000	225,600	6
(d) Field Coordination.....	1974	397,700	34,100	74,000	12,000	23,452	10,500	20,000	7,800	12,000	591,552	22
	1975	465,400	39,400	94,000	7,000	39,000	13,500	50,000	10,800	9,000	728,100	22
(e) Communications.....	1974	280,100	24,000	2,300	---	2,000	7,400	4,900	3,400	1,500	325,600	14
	1975	340,700	29,200	5,000	---	6,000	9,000	10,800	4,000	2,000	406,700	14
(f) Equal Opportunity.....	1974	1,620,600	141,600	295,000	25,000	38,286	16,000	66,000	25,000	20,000	2,247,486	95
	1975	1,675,800	145,900	310,000	25,000	71,000	16,000	71,500	27,000	20,000	2,362,200	95
(g) A/S - Congressional and Legislative Affairs.....	1974	678,100	59,900	17,100	---	13,200	16,300	15,600	8,400	3,500	812,100	40
	1975	699,100	61,200	17,100	---	13,200	21,300	15,600	8,400	3,500	839,400	40
(h) A/S - Program Dev. & Budget..	1974	1,567,400	129,900	75,300	3,200	61,900	19,100	244,200	19,100	33,900	2,154,000	69
	1975	1,879,800	153,700	110,300	3,200	61,900	23,100	231,200	24,100	43,000	2,530,300	81
Total Dept'l. Direction...	1974	5,561,800	480,300	521,100	41,200	156,038	96,000	385,800	76,000	85,400	7,403,638	285
	1975	6,157,800	525,000	597,400	36,200	210,600	109,600	414,200	87,100	92,000	8,229,900	297
2. Program Direction and Coord:												
(a) A/S - Energy and Minerals.....	1974	1,810,800	156,000	152,500	8,000	94,600	57,400	7,270,900	38,500	77,600	9,666,300	109
	1975	679,700	57,100	34,000	---	3,000	7,400	12,600	6,200	4,800	804,800	30
(b) A/S - Land and Water Res.....	1974	581,900	49,400	36,400	500	8,600	6,400	12,900	3,900	4,200	704,200	26
	1975	680,600	57,300	41,300	500	8,600	8,100	15,000	5,200	6,700	823,300	30
(c) A/S - Fish & Wildlife & Parks.	1974	331,600	28,400	22,400	---	10,800	2,900	11,300	4,500	3,400	415,300	17
	1975	344,300	29,300	23,400	---	10,800	2,900	11,300	4,500	3,400	429,900	17
(d) Territorial Affairs.....	1974	310,700	23,400	31,600	---	8,200	4,200	11,800	4,800	1,800	396,500	13
	1975	317,000	23,600	31,600	---	15,500	4,200	11,800	4,800	1,800	410,300	13
(e) Indian Affairs.....	1974	198,800	21,100	9,300	---	1,300	600	2,400	1,900	1,600	237,000	8
	1975	206,100	21,600	10,000	---	1,300	600	2,400	1,900	1,600	245,500	8
Total Prog. Dir. & Coord.....	1974	3,233,800	278,300	252,200	8,500	123,500	71,500	7,309,300	53,600	88,600	11,419,100	173
	1975	2,227,700	188,900	140,300	500	39,200	23,200	53,100	22,600	18,300	2,713,800	98

SALARIES AND EXPENSES

ESTIMATED OBLIGATIONS BY SUBACTIVITY AND OBJECT CLASS, FISCAL YEARS 1974 and 1975

Activity/Subactivity	Fiscal Year	Personnel Compensation	Personnel Benefits	Travel	Transportation of Things	Rent Com. & Utilities	Printing & Reprod.	Other Services	Supplies and Materials	Equipment	Total	Positions
3. Administrative Management:												
(a) A/S - Management	1974	$ 162,700	$ 13,800	$ 11,300	---	$ 4,500	$ 1,900	$ 7,700	$ 2,000	$ 3,600	$ 207,500	7
	1975	168,000	14,200	11,300	---	4,500	2,000	8,800	2,000	3,600	214,400	7
(b) ADP Management	1974	155,100	13,200	15,000	2,000	4,000	2,000	9,500	3,200	1,300	205,300	7
	1975	161,300	13,600	15,000	2,000	4,000	2,000	59,500	3,200	1,300	261,900	7
(c) Secretarial Operations	1974	585,800	49,100	2,000	---	4,000	5,300	26,000	6,000	6,600	684,800	38
	1975	682,800	57,100	2,000	---	4,900	7,000	34,300	7,700	9,000	804,800	42
(d) Audit and Investigation	1974	2,146,500	170,500	346,100	10,900	21,000	19,400	132,800	17,400	14,400	2,879,000	123
	1975	2,207,900	174,100	357,000	10,900	22,000	20,000	146,800	18,800	15,400	2,972,900	123
(e) Management Operations	1974	625,000	54,400	18,400	2,000	9,000	8,700	38,900	11,500	11,000	778,900	48
	1975	645,000	55,700	18,400	2,000	10,000	9,000	42,700	12,000	11,500	806,300	48
(f) Management Consulting	1974	437,900	37,700	17,500	---	6,200	5,000	13,500	3,800	5,700	527,300	20
	1975	449,400	38,300	17,500	---	6,200	6,000	16,000	3,900	5,700	543,000	20
(g) Personnel Management	1974	547,700	47,600	6,000	---	1,300	6,300	17,000	3,500	3,400	632,800	33
	1975	610,400	52,800	9,000	---	1,300	7,000	24,000	4,800	5,000	714,300	35
(h) Management Services	1974	378,800	32,400	14,500	---	7,000	6,000	11,300	4,200	2,300	456,500	18
	1975	496,800	43,000	21,000	---	7,500	12,500	43,600	7,200	10,100	641,700	24
Total Administrative Mgmt.	1974	5,039,500	418,700	430,800	14,900	57,000	54,600	256,700	51,600	48,300	6,372,100	294
	1975	5,421,600	448,800	451,200	14,900	60,400	65,500	375,700	59,600	61,600	6,959,300	306
4. General Services	1974	---	21,500	6,000	---	180,200	20,000	76,000	7,000	7,000	317,700	--
	1975	---	27,000	6,000	---	1,996,000	25,000	76,000	7,000	7,000	2,144,000	--
Total Appropriation, Salaries and Expenses	1974	13,835,100	1,198,800	1,210,100	64,600	516,738	242,100	8,027,800	188,200	229,300	25,512,738	752
	1975	13,807,100	1,189,700	1,194,900	51,600	2,306,200	223,300	919,000	176,300	178,900	20,047,000	701

DEPARTMENT OF THE INTERIOR
EXPLANATION OF LANGUAGE CHANGE

Proposed Change:

"Sec. 106. In addition to the aircraft specifically authorized under this act there is hereby authorized for acquisition four surplus aircraft for replacement only. Such acquisitions shall be integral to the provision of centralized aircraft services in Alaska."

Explanation of Lanugage Change:

In an effort to upgrade our Alaskan fleet we are requesting authority to acquire from surplus four additional aircraft for replacement only. This authority is conditional in that it is subject to the availability of such surplus crafts.

NASA has several planes which it may declare surplus in fiscal year 1975 that are ideally suited for Alaskan operations. Surplus aircrafts of other agencies may also become available that are suitable and can be operational at a substantial savings compared to the purchase price of new craft. However, acquisition can be made only with Congressional approval of this proposed authority.

OFFICE OF THE SECRETARY
DEPARTMENTAL OPERATIONS

Highlight Statement

The fiscal year 1975 appropriation request for the account "Departmental Operations", Office of the Secretary is $9,554,000, a net increase of $2,924,000 over fiscal year 1974. The $700,000 appropriated for staging the World Energy Conference has been reflected as a nonrecurring item. Included in this increase is $834,900 for the base cost of space, services and facilities provided by GSA in accordance with Public Buildings Amendments of 1972, P.L. 92-313. Additional space requirements associated with program expansion have been included in the respective program increases.

This appropriation account is composed of the following activities:

- Office of Hearings and Appeals - for which $5,255,800 is requested for fiscal year 1975. Included in this amount is $242,000 for annualization of hearing requirements for Coal Mine Health and Safety, and the Alaskan Native Claims.

- Natural Resources Library - for which $1,794,500 is requested for fiscal year 1975. Increased funding is requested primarily to maintain the current acquisition level of books and subscriptions. The cost of these items are increasing approximately 25% annually.

- Johnny Horizon Program Office - for which $253,700 is requested for fiscal year 1975. Funding for this program has essentially been held to the fiscal year 1974 level.

- International Geothermal Symposium - for which $250,000 is requested for fiscal year 1975. This amount will finance approximately two-thirds of the cost of the United Nations sponsored symposium to be held in the United States in May 1975. This symposium will bring together approximately 1,000 international specialists in geothermal energy exploration and development from industry, the academic community, and government for the purpose of sharing technical information.

- Office of Research and Development - for which $2,000,000 is requested for fiscal year 1975. This program had previously been included in the Secretary's "Salaries and Expenses" account. The objective of this office is to provide for the coordination, development and implementation of Departmental resources towards an integral non-nuclear energy research and development program to meet national needs.

Appropriation, 1973	$4,066,000	
Supplemental appropriation, 1973	400,000	
Total appropriation		$4,466,000
Transferred to other accounts:		
Transferred to "Operating Expenses, Public Buildings Service," General Services Admin	-2,888	
Transferred from other accounts:		
Transferred from "Salaries and Expenses", Office of Oil and Gas	+73,000	
Transferred from "Construction and Maintenance," Bureau of Land Management	+200,000	
Net transfers, 1973		+270,112
Total available, 1973		4,736,112
Appropriation, 1974	5,737,000	
Supplemental appropriation, 1974	543,000	
Pay cost supplemental (January and October pay increases)	350,000	
Total available, 1974		6,630,000

Summary of Increases and Decreases, 1975

	Base for 1974	Increase 1975	
Office of Hearings and Appeals	$4,429,300		
Annualization of 1974 pay cost		58,300	
Annualization of 1974 supplemental		242,000	
Base cost for GSA space rental		425,900	
Maintain current level of operation		100,300	
Natural Resources Library	1,270,000		
Annualization of 1974 pay cost		21,200	
Base cost for GSA space rental		375,300	
Maintain current level of operations		128,000	
Johnny Horizon Program Office	230,700		
Annualization of 1974 pay cost		2,500	
Base cost for GSA space rental		15,700	
Maintain current level of operations		4,800	
World Energy Conference	700,000		
Decrease due to nonrecurring item		-700,000	
International Geothermal Symposium	---		
Federal Government's contribution to UN sponsored symposium		250,000	
Office of Research and Development	---		
Funding change, annualization of 1974 supplemental, and increased staffing		[illegible],000,000	
Net Increase, 1975			+2,924,000
Budget Estimate, 1975			9,554,000

DEPARTMENTAL OPERATIONS

Analysis by Activity

Activity	F.Y. 1973 Amount Available	Fiscal Year 1974		
		Total Appropriation	Pay Cost Supplemental	Adjusted Amount Available
1. Office of Hearings and Appeals..	$3,169,923	$4,171,000	$258,300	$4,429,300
2. Natural Resources Library.....	1,219,359	1,189,000	81,000	1,270,000
3. Johnny Horizon Program Office...	188,874	220,000	10,700	230,700
4. World Energy Conference.....	---	700,000	---	700,000
5. International Geothermal Sympos.	---	---	---	---
6. Office of Research and Development.....	---	---	---	---
Unobligated balance lapsing.....	157,956	---	---	---
Total.....	4,736,112	6,280,000	350,000	6,630,000

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Adjusted Amt. Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
1. Office of Hearings and Appeals..	$3,169,923	$4,429,300	$5,255,800	$+826,500
2. Natural Resources Library.....	1,219,359	1,270,000	1,794,500	+524,500
3. Johnny Horizon Program Office.....	188,874	230,700	253,700	+23,000
4. World Energy Conference.....	---	700,000	---	-700,000
5. International Geothermal Sympos..	---	---	250,000	+250,000
6. Office of Research and Develop...	---	---	2,000,000	+2,000,000
Unobligated balance lapsing.....	157,956	---	---	---
Total.....	4,736,112	6,630,000	9,554,000	+2,924,000

OFFICE OF THE SECRETARY
DEPARTMENTAL OPERATIONS

ANALYSIS OF INCREASES

	F.Y. 1974 Adj. Approp.		Fiscal Year 1975 Increases						F.Y. 1975 Appropriation Request	
	Positions	Funds	Annualization of FY 1974 Pay Cost	Supplemental Annualization	Maintain Current Level of Operation	New Pos. & Related Funds	Total Increases Positions	Total Increases Funds	Positions	Funds
1. Office of Hearings and Appeals.....	188	$4,429,300	$58,300	$242,000	$526,200	$ ---	--	$826,500	188	$5,255,800
2. Natural Resources Library.	58	1,270,000	21,200	---	503,300	---	--	524,500	58	1,794,500
3. Johnny Horizon Program Office.....	7	230,700	2,500	---	20,500	---	--	23,000	7	253,700
4. World Energy Conference...	--	700,000	---	---	---	-700,000	--	-700,000	--	---
5. International Geothermal Symposium.....	--	---	---	---	---	250,000	--	250,000	--	250,000
6. Office of Research and Development.....	--	---	---	90,000	18,000	1,892,000	27	2,000,000	27	2,000,000
TOTAL.....	253	6,630,000	82,000	332,000	1,068,000	1,442,000	27	2,924,000	280	9,554,000

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OFFICE OF THE SECRETARY

DEPARTMENTAL OPERATIONS

JUSTIFICATION

1. OFFICE OF HEARINGS AND APPEALS

Office of Hearings and Appeals: Fiscal year 1974, $4,429,300; fiscal year 1975, $5,255,800; increase, $826,500. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	+$300,300	--	$5,255,800	188	Annualization of Supplementals.
(2)	+425,900	--	---	--	Space costs.
(3)	+100,300	--	---	--	Maintain current level of operation.
	+826,500	--			

Cost Factors Involved in Increases

(1) $58,300 for annualization of the October pay increases: $81,000 for the full year cost of the Alaska Native Claims Ad Hoc Board; and $161,000 for full year funding of the Coal Mine Health and Safety supplemental staff.

(2) Reimbursement for space, services and facilities provided by GSA in accordance with Public Buildings Amendments of 1972, P.L. 92-313.

(3) Necessary funding to maintain current level of office support. Added costs includes step increases and reduction of lapses $75,600, increased hearings costs, $22,500 and supplies, $2,200.

The Office of Hearings and Appeals provides a secretarial office which consolidates the quasi-judicial responsibilities of the Department of the Interior. Administrative Law Judges and formal boards of appeals render decisions in cases pertaining to: (a) contract disputes; (b) oil import quota appeals; (c) Indian appeals; (d) public and acquired lands and their resources; (e) submerged offshore lands of the outer continental shelf; (f) mine health and safety; (g) personnel grievances and appeals; (h) environmental impact; (i) enforcement of the importation and transportation of rare and endangered species; (j) environmental quality; and (k) uniform relocation assistance and real property appeals. The Director of the Office of Hearings and Appeals may assign Administrative Law Judges for the purpose of holding rule-making hearings and he may also assign Administrative Law Judges or establish ad hoc boards of appeal to meet special requirements of disputes not falling under one of the previously listed categories. Decisions of the boards are final for the Department.

The fiscal year 1975 budget request for the Office of Hearings and Appeals is $5,255,800, an increase of $826,500 over the current year. The increase provides for $400,600 to continue programs initiated in the last two fiscal years. This includes within-grade pay increases and the filling of vacancies not fully funded during the current year. $425,900 will be required to pay for the space costs determined by the General Services Administration for existing space assigned to the office.

Contract Appeals - The present caseload of over 50 cases before the Interior Board of Contract Appeals includes several major disputes which involve voluminous records, lengthy hearings and several millions of dollars each. These cases will require most of the Board's attention.

Indian Matters - The office has increased its responsibilities as it affects the Indian people to include administrative appeals from decisions of the Bureau of Indian Affairs. The transfer of these functions complete the Secretary's plan to include all quasi-judicial activities in this single office. In order to accomodate this additional workload, the Interior Board of Indian Appeals membership has expanded to three full-time members. This Board continues to decide appeals on Indian probate matters as well as the administrative appeals from the Bureau of Indian Affairs. The Indian Probate Administrative Law Judges, operating out of eight different cities, continue their excellent record of local services to the Indians in settling probate matters. Both the Board of Indian Appeals and the Administrative Law Judges are keeping current on their respective caseloads.

Mine Health and Safety - The Federal Coal Mine Health and Safety Act of 1969 and the Federal Metal and Nonmetallic Safety Act affect approximately 24,000 mines and 385,000 employees in mines throughout the United States. The caseload under the Metal and Nonmetallic Mine Safety Act has not yet developed. The growing caseload resulting from the Coal Mine Health and Safety Act has been accelerating progressively for the past three years. A supplemental appropriation in fiscal year 1973 provided for increasing the number of Administrative Law Judges and related support in order to meet the approximately 183 new penalty cases being filed per month. The number of penalty cases received by the Office of Hearings and Appeals has now increased to over 225 cases monthly. As new procedures instituted by the Mining Enforcement and Safety Administration are made fully operational, this number will grow even higher, probably to a monthly total exceeding 600 cases. Aside from civil penalty cases, we receive approximately 25 other cases a month under the Federal Coal Mine Health and Safety Act. The present backlog of cases in this program now approaches 4,000.

In December 1973, the Congress provided additional funding which has permitted the Office to employ a law clerk or attorney adviser for each Administrative Law Judge. Most of these new positions were filled by early February. We can already see a marked increase in each judge's capacity to dispose of cases.

It is our intent to reduce the backlog in Coal Mine Health and Safety program to a point where cases will be heard within one year after they are filed with the Hearings Division. The increase in staffing provided by Congress will permit us to attain this goal in approximately three years.

The increased capacity to decide hearings cases will ultimately affect the number of appeals to the Interior Board of Mine Operations Appeals. At the present time, the Board is disposing of cases in a reasonable length of time. We will continue to closely monitor the caseloads both for hearings and for appeals to the Board. However, if the influx of appeals continues to accelerate, additional staffing for the appeals board will be required in order for the Department to meet its responsibilities.

Oil Import Quota Appeals - The Oil Import Appeals Board considers petitions on appeals from persons affected by oil import regulations. The Board's membership is composed of a representative from each of three Departments: Interior, Commerce and Justice. The Interior member serves as the Chairman and the Board is housed and administered by the Department of the Interior. The number of cases filed with the Board during the current calendar year exceed any previous year's applications by threefold. The increase of cases filed and decisions rendered during the last calendar year reached over 450. In previous years, no more than 177

applications were filed with the Board. This increased workload is a direct offshoot of the energy crises now facing the nation. The Board's efforts to be responsive to the needs of the petitioners and its expeditious handling of cases before it have been extraordinary. The three Departments have each named alternate members to the Board. This action and a restructuring of Interior's staff support have enabled the Board to attain this extraordinary production record.

Public Lands - Since the Office of Hearings and Appeals was organized in 1969, the hearings backlog in public land cases has been reduced from twenty-one months to twelve months. We hope to reduce this backlog even more, but the need to meet the tremendous increase in coal mine safety cases may preclude any further reductions in the near future. The backlog in appeals to the Interior Board of Land Appeals has also been reduced to approximately one year. This is due largely to a reorganization of the Board's method of operations. We continuously review the implications of the increasing emphasis placed on the evaluation of the environmental and ecological impact on all areas of public land use. The Trans Alaska Pipeline and disputes under the Public Land Laws involving questions of entitlement of public lands in Alaska to natives, not covered under the Alaska Native Claims Act, may well result in several hundred new cases. Even though we have received a modest number of entitlement cases, we are not yet able to determine what the long term will bring. Therefore, we are not now requesting any additional funding.

Alaska Native Claims - A supplemental appropriation in fiscal year 1974 provided for the establishment of the Alaska Native Claims Ad Hoc Appeals Board. This Board is headquartered in Anchorage, Alaska, and is presently made up of four board members, two attorney-advisers and two clerks. This nucleus appellate group is already dealing with disputes concerning Village Corporations. This spring and summer the Board's caseload will grow to include appeals of Village and Regional Corporation selections. The outcome of these cases will affect land selections and land use throughout the state of Alaska.

If the caseload expands and accelerates at the rate we anticipate, it may be necessary to increase the staffing and resource levels for the Ad Hoc Board even further. The time constraints imposed by the Act require prompt decisions and actions in response to the appeals under this Act and we fully expect a continued increased workload. However, we have chosen a relatively conservative approach to meet these needs. We will continue to evaluate any dramatic fluctuations which may cause changes in staffing requirements.

Other Programs - The remaining quasi-judicial responsibilities mentioned above are being disposed of promptly. In addition to the normal program responsibilities, the Office of Hearings and Appeals is being called upon with increasing frequency to hold public hearings related to such environmentally significant matters as offshore oil and gas drilling in the Santa Barbara Channel.

2. NATURAL RESOURCES LIBRARY

Natural Resources Library: Fiscal year 1974, $1,270,000; fiscal year 1975, $1,794,500; increase, $524,500. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+21,200	--	$1,794,500	58	Pay increase annualization.
(2) +375,300	--	---	--	Space costs.
(3) +31,000	--	---	--	Book binding.
(4) +97,000	--	---	--	Increased costs of subscriptions and books.
+524,500	--			

Cost Factors Involved in Increases

(1) Annualization of the October 1973 pay increase.

(2) Reimbursement for space, services, and facilities provided by GSA in accordance with Public Buildings Amendments of 1972, P.L. 92-313.

(3) Necessary funding to bind priority reference material.

(4) Necessary funding to maintain current level of books and subscriptions resulting from annual cost increases of approximately 25%.

The Natural Resources Library is the national basic and archival source for scholars, industry, and state officials throughout the United States concerned with matters involving energy, resources, lands, minerals, conservation, parks, recreation, reclamation, water, fisheries and other significant areas of the environment.

. Information Services - Reference services are provided by assembling information and data, and by interpreting the collection for users doing scientific, technical, legal, and administrative research. Over 10,000 requests for reference assistance will have been handled during the fiscal year, an increase of 25 percent over the previous year.

. Locating and Lending Services - Loan services are provided to make library materials readily available to employees with a minimum of delay -- including the provisions of photocopies when necessary. During fiscal year 1974, the staff will have processed over 18,000 requests to borrow material from the central library, field libraries, other Federal agencies, and universities. 4,000 of these requests will not be available in the Library's collection and will thus have to be located and borrowed from other libraries before being provided to library clientele. Although this item is still too high it shows an improvement in the development of the collection over past years when approximately twenty-five percent of the requests could not be filled from Interior sources. During this period, more than 15,000 items will be circulated to Departmental employees. In addition another 20,000 individuals will have

visited the Natural Resources Library to use its literature resources site.

. The Collection - The Natural Resources Library presently numbers more than 775,000 items. Materials are constantly reviewed and re-evaluated in order to weed out obsolete material and to keep the collection pertinent and current to meet the Department's mission.

Fiscal year 1973 brought continued effort in actions to make the library even more responsive to the increasing requirements for access to current information and research literature. Emphasis was given to the demands of the Department and those people working on improving the quality of the environment and other natural resources programs.

Over the past two years it has been possible to correct some of the serious deficiencies in the periodical research literature in attempting to provide Departmental officials with a fully informed up-to-date collection.

. Binding - The Natural Resources Library adds over 95,000 pieces to its collection each year. Sixty-five percent of these pieces consist of loose periodical issues and paper covered books or reports. Binding will protect these issues from deterioration and loss in normal use, make materials more convenient to use, both by library patrons and staff, as well as conserve storage space.

  Currently the collection of the Department of the Interior publications is being brought under bibliographic control. This collection is of great historical and research value to the Department and the Nation. In order to properly maintain and preserve these materials, it will be necessary to bind a large number of them. We are requesting funds to bind an additional 5,000 volumes a year.

. Book Budget - The sharply rising prices of domestic and foreign monographs and serials have seriously erroded the purchasing power of the Natural Resources Library. The Department's requirements for more complete coverage in the subject areas affected by developments in the field of energy and environmental impact studies have adversely affected the adequacy of the funds available. The price of foreign books have increased approximately 25 percent within the past year. This rise is due to two factors: (1) regular publisher price increase and (2) devaluation of the U.S. dollar. We have been advised that foreign titles will increase in price by 25% in 1974 over 1973. Even the Federal clearinghouse has announced a price increase for microfiche from 95¢ each to $1.45. The average price for all periodicals increased by 22 percent in 1973 over 1972. Major areas showing significant price increases were: engineering 46%, chemistry and physics 24%, sociology and anthropology 24% and law 18%. From the above statistics it can be concluded that rising costs of books and subscriptions necessitate larger book budgets to keep up the current library collection. Since the Natural Resources Library users depend on the library collections as a current source of information and research center, the Library has the responsibility to adequately maintain the collection in order to respond to the needs of the Department.

In summary, we are proposing to continue our efforts to maintain and, where possible, improve our capability to respond to the requirements for access to current information and research literature by the Department and those people working on improving the quality of the environment and other natural resources programs.

3. JOHNNY HORIZON PROGRAM OFFICE

Johnny Horizon Program Office: Fiscal year 1974, $230,700; fiscal year 1975, $253,700; increase, $23,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+7,300	--	$253,700	7	Increased cost of printed materials.
(2) +15,700	--	---	--	Space costs.
23,000	--			

Costs Factors Involved in Increases

(1) Increase costs of purchasing and printing anti-litter informational materials ($4,800), and annualization of the October 1973 pay increase ($2,500).

(2) Reimbursements for space, services and facilities provided by GSA in accordance with Public Buildings Amendments of 1972, P.L. 92-313.

The Johnny Horizon Program was established by Public Law 91-419, approved September 27, 1970, to promote environmental awareness and education required to motivate citizens and volunteer support of anti-litter and environmental improvement programs. The Johnny Horizon '76 "Let's Clean Up America For Our 200th Birthday" campaign is an expansion and redesign of a program which the Bureau of Land Management launched in 1968 to clean up litter and beautify the public lands. On July 1, 1972, the Program was assigned to the Secretariat to increase the nationwide appeal and scope of the program and to permit greater involvement of all Interior Bureaus and to stimulate interest in the Program by other Federal and State agencies and outside private organizations.

The Johnny Horizon Program regulations (43 CFR Part 25) were revised primarily to allow non-profit organizations use of the Johnny Horizon name and symbol for fund-raising projects in support of local community environmental improvement projects. The regulations update the rules which govern commercial and non-commercial uses of the Johnny Horizon name and symbol and authorize the Program to accept contributions.

The Program has two major phases. The first is educational to make all Americans aware - from school children to senior citizens - that environmental improvement and protection are everyone's responsibility, and that each and every individual can make a diference.

The second phase is on-the-ground action, designed to inspire people to work together to prevent litter, minimize pollution and use our natural resources wisely. This on-the-ground action phase asks people to accept an "I'll help, too" attitude and seeks citizen participation in volunteer cleanup, beautification, recycling, and conservation projects.

In response to Congressional Joint House Resolution 695, the on-going Johnny Horizon '76 "Let's Clean Up America For Our 200th Birthday" Program was highlighted with a Presidential Proclamation proclaiming the period of September 15 through October 15, 1973, as Johnny Horizon '76 Program. Via mass media, trade associations, civic organizations, the schools, state, county, city governments on down to local neighborhoods, people everywhere are becomming concerned about the appearance of their country -- their own backyard.

The increase of $23,000 requested for this program is necessary to carry required space costs and workload increases associated with the higher cost of purchasing printing, and distributing anti-litter informational material.

4. WORLD ENERGY CONFERENCE

World Energy Conference: Fiscal year 1974, $700,000; fiscal year 1975, -0-; decrease, $700,000. The decrease consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$-700,000	--	---	--	Non-recurring item.

Funding for the World Energy Conference to be held in Detroit, Michigan in Sept. 1974 was a non-recurring expense item. Funding for this program has been approved by the Congress and included in the 1974 Interior and Related agencies appropriation.

5. INTERNATIONAL GEOTHERMAL SYMPOSIUM

International Geothermal Symposium: Fiscal year 1974, -0-; fiscal year 1975, $250,000; increase, $250,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$+250,000	--	$250,000	--	Proposed contribution to the third United Nations International Geothermal Symposium.

Cost Factors Involved in Increases

Approximately 2/3 of the estimated costs ($400,000) of the Third United Nations International Geothermal Symposium.

The Third United Nations International Geothermal Symposium will be a meeting of international specialists in geothermal energy exploration and development from industry, the academic community, and government for the purpose of sharing technical information. The Symposium is open to all interested nations, including Iron Curtain countries, but attendance will be limited to 1,000 participants chosen on the basis of national delegations and attendants, recipients of special U.N. scholarships or fellowships, U.N. and U.S. government specialists and officials dealing with energy development, and professionals primarily in the field of energy.

A significant benefit of the International Geothermal Symposium is the worldwide cooperation of nations, large and small, highly industrialized or in earlier stages of economic development, working together to solve energy problems.

History of the Symposium - Two international symposiums on geothermal energy have been held under the sponsorship of the United Nations in the past 14 years. The first symposium held in Rome, Italy, August 21-31, 1961, was actually a section of the United Nations Conference on New Sources of Energy. The conference was financed by the National Electric Energy Agency and National Research Conference of the Foreign Ministry, both official departments of the Italian National Government.

The success of the geothermal section of the Conference on New Sources of Energy prompted the United Nations to sponsor, and the Italian Government to again finance a second United Nations Symposium on the Development and Utilization of Geothermal Resources on September 22 to October 1, 1970, in Pisa, Italy. Proceedings of this and the Rome Conference constitute the largest collection of papers available to data on the exploration for and utilization of geothermal energy.

1974 Conference in San Francisco - The United Nations, Department of the Interior, Department of State, State of California, Geothermal Resources Council, and industrial geothermal development companies are organizing the Third United Nations International Geothermal Symposium which will be held in San Francisco, California, in the second half of May (10 days)1975. The conference is directly responsive to President Nixon's energy messages of April 18 and June 29, 1973, where international cooperation in energy research is urged. Geothermal energy development is particularly desirable because of its environmental advantages over many other energy alternatives.

The general program of the Symposium will be based on solicited and unsolicited papers in exploration and evaluation technology, status of resources development, steam production and energy conversion technology, multi-purpose utilization, economics, environmental impact, and legal and institutional aspects of geothermal energy development. Papers on the state-of-the-art in the respective fields will be summarized in rapporteur reports, and the program committee will select papers and invite speakers for individual presentation. Three to four simultaneous language translations will be carried out, with no overlapping sessions.

The United States is now the largest producer of electrical power from geothermal energy, and the International Geothermal Symposium will permit the United States to make a landmark contribution to world understanding of geothermal energy and to peaceful cooperation and economic growth of all countries.

Financing the Symposium - A tentative budget, established for the Third United Nations International Geothermal Symposium shows that the costs will be approximately $400,000. Of this amount, the State of California will contribute approximately $50,000; the United Nations will provide the services of its technical and secretarial personnel and make allowances for salaries of its employees, costs of travel and per diem for organization and participation in the Symposium, costs of printing announcements and registration forms, and funds for fellowships for participants from developing countries. This will be a contribution, in kind, of over $75,000. Approximately $15,000 will be recieved in registration fees, and about $10,000 in exhibitor fees. The remaining $250,000 is proposed to be contributed by the Federal Government.

The Department of the Interior believes it desirable and appropriate for the United States Government to offer the significant financial support to the International Geothermal Symposium as the U.S. is now the world leader in geothermal research and has the most urgent need for energy development. It is appropriate that the Department of the Interior accept the responsibility of the symposium, since the U.S. Geological Survey, Bureau of Mines, and Bureau of Reclamation all have programs aimed at geothermal energy development.

Summary - The Department of the Interior believes financial support of the United States Government is justified for the following reasons:

1. The International Geothermal Symposium will be open to all nations from both the free world and Iron Curtain countries. Non-commerical and non-political in nature and structure, it affords the United States a strong opportunity to build

relationships with key persons in industry and government on a world-wide basis. The International Geothermal Symposium has twice demonstrated its effectiveness in international cooperation in the development of environmentally clean energy.

2. International cooperation in energy research is in direct response to the President's energy message of April 18, 1973, and his Clean Energy Message of June 1971.

3. Clean energy is an issue of great concern to the world. This Symposium allows the Government to reaffirm its concern and to demonstrate its committment to solve problems related to clean energy development.

4. Through participation in the Symposium, there is a strong blend of involvement between international governments, private industry, and academic communities in solving the energy crisis of the world.

5. The United States will benefit through the gathering of technical and economic information on geothermal energy development from leading scientists and industrialists from many nations.

6. As host of the International Geothermal Symposium, the United States will be able to display the range and depth of its technological development and to strengthen its leadership role in the world community.

7. Most of the 1,000 symposium participants will be from foreign countries. Intimate exposure of these key participants to U.S. technological achievements through exhibits, papers, and field trips offer strong potential to aid U.S. trade and foreign commerce on a long-term basis.

8. Precident exists for the U.S. Government to offer financial support to international conferences aimed at world problems. The 1936 and 1974 World Energy Conferences and the 1967 International Conference on Water for Peace are three examples.

9. The International Geothermal Symposium will offer a unique vehicle to encourage interaction of knowledgeable U.S. specialists with their counterparts in other nations.

10. International Geothermal Symposiums held in Rome and Pisa, Italy have received appropriate levels of financial support from the Italian Government in recognition of their value and importance.

6. OFFICE OF RESEARCH AND DEVELOPMENT

Office of Research and Development: Fiscal year 1974, -0-; fiscal year 1975, $2,000,000; increase, $2,000,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) +695,500	10	$2,000,000	27	Base level transfer.
(2) +459,500	17	---	--	Increased staffing requirements.
(3) +845,000	--	---	--	Increased contract research.
+2,000,000	27			

Cost Factors Involved in Increases

(1) Base level of program previously included in the Secretary's "Salaries and Expenses" account, $587,500 and 10 positions; annualization of 1974 supplemental and GSA rental payments, $108,000

(2) 17 additional positions averaging $27,000 consisting of $368,800 for salaries and benefits, $19,500 for travel and transportation of things, and $71,200 for office space, communications, printing, supplies and equipment.

(3) $845,000 for increased contract research effort for a total program of $1,175,000 ($330,000 included in item (1) base level).

The need for coordination of steadily expanding Departmental energy and minerals research and development programs, and development and implementation of an intergrated national, non-nuclear, energy R&D program to meet national needs was the basis for establishment of the Office of Research and Development.

The Office of Research and Development is responsible for:

- Analyzing all non-nuclear energy and mineral forms, from availability through extraction, processing, conversion, to end use with emphasis on energy sources.

- Considering the numerous technological problems involved in converting these energy and mineral forms to electric power, other useful fuel forms and metals as well as the associated environmental, health and safety, economic, social, etc. implications.

- Formulating an evaluation and review procedure by which these sciences and technologies can be judged against the national need in all its aspects.

- Developing an optimal R&D program responsive to the nation's requirements; overseeing the implementation of this program; and continually re-evaluating not only the program but the premises upon which the program was based.

The validity of the evaluation techniques used in these analyses will be monitored to insure that the priorities established continue to be appropriate and the program optimal.

To accomplish this mission, the Office of Research and Development will recruit and maintain a small, highly professional in-house staff of appropriate technical, analytical and supervisory disciplines. In addition, it is contemplated that the professional staff will draw as necessary from authoritative sources throughout this country and abroad for assistance in the development, evaluation and implementation of its R&D plans.

One of the initial efforts of the staff will be the institution of a program evaluation and review system which will assist in the comparison of competing technologies by considering their estimated cost, time to completion, potential impact, etc. For example, is the liquefaction of coal a more promising conversion method than gasification? If this proves to be the case, should gasification be abandoned? Does improved combustion fit the picture? Such questions must be answered if a rational set of priorities for program components is to be developed. It is expected that in the establishment of this very important evaluation and review system, the staff will draw on the expertise of non-Governmental contractors.

The organic staff will be concerned with a general overview of the Department's R&D programs, plans, and budgets. While many studies will be conducted by the staff, it is anticipated that several subjects will call for analysis of such extent and detail as to require outside assistance. Candidate subjects for detailed study by contractors include:

(1) Criteria for selecting among competing technologies for producing fuels from coal.

(2) Long-term R&D goals of the coal research program, including analysis of the feasibility of integrated refineries to process coal into a mix of liquid, solid, and gaseous products so as to maximize resource utilization and minimize waste and environmental impact of coal conversion and utilization.

(3) Development methodology and guidelines for analysis of environmental impact of fossil fuel extraction and conversion processes.

(4) Role of fossil fuel R&D in determining future U.S. energy supply and demand balances, leading to methodology to predict the impact of alternative R&D strategies on those balances.

(5) Resource, environmental, and socioeconomic impacts of alternative R&D investments, as they imply alternative geographic patterns of resource development: e.g., Western vs. Eastern, or surface vs. deep coals.

(6) Analysis of problems and potential of advanced power cycles, with a view to early selection of the more promising avenues for research.

(7) Analysis of the effectiveness, relevance, and desirability of institutional factors affecting implementation of research results, institutional constraints on technology transfer, etc.

While specific funding levels for individual studies levels have not been definitely established, approximately $200,000 would be devoted to each of the first three subjects, perhaps $100,000 to each of the last four and for employment of consultants on specific technical questions which arise during the course of the

year. Individual contracts would be smaller, so that the Office could receive the benefit of more than one outside perspective on each question.

In response to these requirements, the Office is organized on a total systems basis including high level technical specialists to deal with resource extraction and benefaction, chemical upgrading and conversion, transport and end use and the interactions between one another and with the many relevant social, economic, etc. constraints. Further, in order to keep the total energy problem in perspective, specialists with operational knowledge of other energy conversion technologies, such as nuclear and solar, are included.

A major office responsibility will be the expansion of cooperative ventures already underway with industry, such as the Interior-American Gas Association program on coal gasification and the Interior-Electric Power Research Institute underground power transmission research program, and initiation of additional, appropriate joint ventures. In the same vein, the Office will emphasize the problems of transfer of Government-developed technology to the private sector, the manpower needs associated with increased utilization of fuel resources, particularly coal, and the technical-scientific interactions with the environment, economy, etc.

PERSONNEL SUMMARY

	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions	225	253	280
Full-time equivalent of other positions	16	8	9
Average paid employment	175	224	266
Average GS grade	10.2	10.4	10.4
Average GS salary	$17,074	$18,138	$18,290

ITEMIZATION OF ESTIMATE

Appropriation Title: Departmental Operations — Office of the Secretary

	1973 Actual	1974 Estimate	1975 Estimate	Increase (+) or Decrease (-)
Program and Financing:				
Total direct obligations	$4,578,156	$6,630,000	$9,554,000	$+2,924,000
Unobligated balance lapsing	157,956	---	---	---
Budget Authority	4,736,112	6,630,000	9,554,000	+2,924,000
Budget Authority:				
Appropriation	4,466,000	6,280,000	9,554,000	+3,274,000
Proposed supplemental for pay increases	---	350,000	---	-350,000
Transferred to other accounts	-2,888	---	---	---
Transferred from other accounts	+273,000	---	---	---
Appropriation (Adjusted)	4,736,112	6,630,000	9,554,000	+2,924,000
Object Classification:				
11 Personnel compensation	3,067,471	4,063,100	5,037,100	+974,000
12 Personnel benefits	245,682	385,600	482,600	+97,000
13 Benefits for former personnel	712	---	---	---
21 Travel and transportation of persons	144,906	265,000	321,300	+56,300
22 Transportation of things	3,176	57,000	33,000	-24,000
23 Rent, communications, and utilities	194,095	246,800	1,150,700	+903,900
24 Printing and reproduction	49,648	126,000	177,800	+51,800
25 Other services	585,783	1,125,300	1,911,300	+786,000
26 Supplies and materials	174,000	150,200	215,200	+65,000
31 Equipment	112,683	211,000	225,000	+14,000
Total Obligations	4,578,156	6,630,000	9,554,000	+2,924,000

DEPARTMENT OF THE INTERIOR
OFFICE OF THE SECRETARY
DEPARTMENTAL OPERATIONS

ESTIMATED OBLIGATIONS BY ACTIVITY AND OBJECT CLASS, FISCAL YEARS 1974 and 1975

Activity	Fiscal Year	Personnel Compensation	Personnel Benefits	Travel	Transportation of Things	Rent, Comm. & Utilities	Printing & Reprod.	Other Services	Supplies and Materials	Equipment	Total	Positions
1. Office of Hearings and Appeals	1974	$3,117,200	$312,300	$229,500	$51,000	$223,800	$63,000	$305,500	$46,000	$81,000	$4,429,300	188
	1975	3,468,900	352,900	250,800	22,000	661,700	69,000	346,500	51,000	33,000	5,255,800	188
2. Natural Resources Library	1974	830,700	62,700	12,700	1,000	17,800	15,000	100,300	102,700	127,100	1,270,000	58
	1975	850,600	64,000	12,700	1,000	393,100	46,000	100,300	152,700	174,100	1,794,500	58
3. Johnny Horizon Program Office	1974	115,200	10,600	22,800	5,000	5,200	48,000	19,500	1,500	2,900	230,700	7
	1975	117,600	10,700	22,800	5,000	20,900	52,800	19,500	1,500	2,900	253,700	7
4. World Energy Conference	1974	---	---	---	---	---	---	700,000	---	---	700,000	--
	1975	---	---	---	---	---	---	---	---	---	---	--
5. International Geothermal Symposium	1974	---	---	---	---	---	---	---	---	---	---	--
	1975	---	---	---	---	---	---	250,000	---	---	250,000	--
6. Office of Research and Development	1974	---	---	---	---	---	---	---	---	---	---	--
	1975	600,000	55,000	35,000	5,000	75,000	10,000	1,195,000	10,000	15,000	2,000,000	27
TOTAL DEPARTMENTAL OPERATIONS	1974	4,063,100	385,600	265,000	57,000	246,800	126,000	1,125,300	150,200	211,000	6,630,000	253
	1975	5,037,100	482,600	321,300	33,000	1,150,700	177,800	1,911,300	215,200	225,000	9,554,000	280

OFFICE OF THE SECRETARY
SALARIES AND EXPENSES
(SPECIAL FOREIGN CURRENCY PROGRAM)

Appropriation, 1973	$500,000
Appropriation, 1974	670,000

Summary of Increases and Decreases, 1975

Research:	Base for 1975	Increase 1975
Funding change for research with Yugoslavia	$315,000	$-315,000
Decrease in research with Poland	355,000	-163,000
Proposed research with India	---	330,000
Net Decrease		-148,000
Budget estimate, 1975		522,000

Analysis by Activity

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
Research	$454,448	$670,000	$522,000	$-148,000
Unobligated balance carryover	73,238	73,238	---	-73,238
Total	527,686	743,238	522,000	-221,238

JUSTIFICATION

Research: Fiscal year 1974, $670,000; fiscal year 1975, $522,000; decrease, $148,000. The decrease consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $-315,000	--	$ ---	--	Funding change for research with Yugoslavia.
(2) -163,000	--	192,000	--	Decrease in research with Poland.
(3) +330,000	--	330,000	--	Proposed research with India.
-148,000	--			

Cost Factors Involved in Decrease

(1) Funding change from excess foreign currency to U.S. - Yugoslavia joint fund.

(2) Completion of four research projects in fiscal year 1974, $170,000; Decrease in funding of three projects

being continued in fiscal year 1975, $40,000; one new project in fiscal year 1975; $40,000 and reserve for fluctiation in exchange rates, $7,000.

(3) Proposed research program with India.

Many changes affecting the Department's special foreign currency research program have occurred since last year. In Yugoslavia, the excess foreign currency funds had decreased to approximately $7.2 million. Officials of the two governments entered into an agreement whereby the Yugoslavia Government would match the remaining U.S. excess foreign currencies and establish a joint fund. Use of this fund would be controlled by a U.S. - Yugoslavia Joint Board on Scientific and Technological Cooperation.

Equally important is the establishment of a plan for an orderly draw-down of excess foreign currencies in Poland. This plan developed by the Department of State, the Office of Management and Budget, and the Department of Treasury assures, with the approval of Congress, funding of Interior research projects through fiscal year 1978.

Negotiations with the Government of India and the Department of State concerning the use of excess foreign currencies have been conducted for the past year. As a result of recent advances in these negotiations the National Science Foundation sponsored an Interior Study Mission to India to review facilities and explore research possibilities of mutual benefit to both countries. A briefing on the research possibilities with India will be provided during the appropriation hearings. If warranted, areas of mutual research benefits will be identified and projects proposed for the Committee's consideration.

The following material summaries the Department's programs in Yugoslavia and Poland.

YUGOSLAVIA

The Department is not seeking a special foreign currency appropriation for research in Yugoslavia. It is our understanding that funding for this effort will be provided from the U.S. - Yugoslav joint fund that has been established and is not subject to the appropriation process. Basically, the U.S. - Yugoslav joint funds provides that the remaining P.L. 480 funds (approximately $7.2 million) will be matched by the Yugoslav Government. Specific project proposals would be approved by the U.S. - Yugoslav Joint Board on Scientific and Technological Cooperation. The Department proposes to fund five continuing Yugoslav projects during fiscal year 1975 from this joint fund amounting to $122,600.

The table below summarizes Interior's participation under the P.L. 480 program and estimated participation in the U.S. - Yugoslav Joint Fund.

	P.L. 480 Cummulative Obligations F.Y. 1972/73	U.S. Yugoslav Joint Fund F.Y. 1974 Estimate	F.Y. 1975 Estimate	F.Y. 1976 Estimate
1. Production of Nickel from Low-Grade Nickel - Bearing Iron Ores (Bureau of Mines).....	$55,393	$19,400	$11,300	$ ---
2. Use of Lignite in the Reduction of Ferrous Metals (Bur. of Mines)	45,078	30,800	---	---
3. Research on Crustal Structure in Relation to Earthquakes, Intrusives, and Metallogenic Provinces (Geological Survey)....	85,246	38,400	55,300	---
4. Research on Ultramofic Rocks as Related to the Exploration for Chromite and Other Economic Minerals (Geological Survey).....	51,203	---	---	---
5. Research on Rare Metal Mineralization (Geological Survey).....	30,099	5,400	10,900	---
6. Research on Geologic and Hydrologic Factors affecting Urbanization and Economic Development (Geological Survey).....	100,100	43,100	29,800	34,000
7. Research on Applications of Geophysics for Defining Permeability in Karstic Terrain (Geological Survey).....	105,219	5,500	15,300	---
8. Desalination of Saline Water (Saline Water).....	42,134	19,400	---	---
Unidentified Projects/Fluctuation in Exchange Rates.....	---	38,000	---	---
Total.....	514,472	200,000	122,600	34,000

(1) PRODUCTION OF NICKEL FROM LOW-GRADE NICKEL-BEARING IRON ORES

Objective of Research

To develop the technology for recovering nickel at economical costs from low-grade nickel bearing iron ores which not only occur in Yugoslavia, but have fairly world-wide distribution.

Goal of the Project

The successful completion of research outlined above so that sufficient technical and economical information becomes available to be able to evaluate the economical exploitation of the deposits.

Benefits

The United States is an important nickel consumer with minor domestic resources and production. The research goal, if achieved, will increase the number of nickel suppliers to the United States in addition to the two principal countries which now supply the bulk of U.S. domestic consumption.

Funding

A total of $55,393 has been obligated for this project through June 30, 1973. $19,400 is programed for 1974 with $11,300 proposed for completion of the project in fiscal year 1975.

(2) USE OF LIGNITE IN THE REDUCTION OF FERROUS METALS

Objective of Research

It is proposed that the subject program in Yugoslavia be continued to develop economical methods for the use of lignite in the reduction of ferrous metals.

Goal of the Projects

The goal of the project would be to bring about the successful economical use of the relatively cheap metal lignite in reducing either nickel or iron to the metallic state. In spite of its wide occurrences around the world, there are a number of technical problems to be solved before lignite is used directly in metallurgical reactions.

Benefits

We have enormous deposits of low grade iron ore in Minnesota which might be reduced with plentiful lignite from North Dakota and the results of any development in the Yugoslav program would have direct application to such work.

Funding

A total of $45,078 has been obligated for this project through June 30, 1973. $30,800 is programmed for completion of this project in fiscal year 1974.

(3) RESEARCH ON CRUSTAL STRUCTURE IN RELATION TO EARTHQUAKES, INTRUSIVES, AND METALLOGENIC PROVINCES

Objective of the Research

To develop a better understanding of crustal structure beneath mountain systems as related to the geologic processes involved in earthquakes, volcanism, and formation of ore deposits.

Goal of the Project

To complete geophysical profiles and geological interpretations along selected traverses across the Dinaride Mountains in Yugoslavia as a means of identifying the deep-crustal structure associated with earthquake, volcanic, and mineral belts.

This project is a continuation of work initiated late in fiscal year 1972. It involves the completion of work on two geophysical profiles during fiscal year 1974, the geological interpretation of geophysical data along profiles completed earlier, and the analysis of regional geologic structure. Special attention is being given to the distribution and downward extent of major faults that separate crustal blocks, and their relation to mineralization.

Benefits

Research techniques and interpretations of deep crustal structure in Yugoslavia will be helpful for comparison with, and possible improvement of, techniques and interpretations applied on comparable studies in the United States. Information on the base of the crust in Yugoslavia will aid in current research on world-wide

mechanisms of continental evolution that affect North America. This project utilizes considerable information and research capacity in Yugoslavia, developed as a result of similar geophysical studies during the past several years.

Funding

A total of $85,246 has been obligated for this project through June 30, 1973. $38,400 is programmed for 1974 with $55,300 proposed for completion of the project in 1975.

(4) RESEARCH ON ULTRAMAFIC ROCKS AS RELATED TO THE EXPLORATION FOR CHROMITE AND OTHER ECONOMIC MINERALS

Objective of the Research

This project is intended to identify factors that may explain the distribution of chromite and other minerals in ultramafic rocks, and the origin and emplacement of these rocks in relation to evolution of the earth's crust.

Goal of the Projects

To complete a detailed study of selected ultramafic masses and associated rocks in Yugoslavia; establish criteria for recognizing their origin, mechanism of emplacement, and economic potential; and compare these criteria with similar rocks in the United States.

This project involves field investigation of ultramafic rocks at selected locations in central Yugoslavia supplemented by petrographic, mineralogic, and geochronologic studies of samples. A vast amount of data previously collected by the Yugoslav geologists is being compiled and evaluated, along with results of new field and laboratory work.

Benefits

An understanding of the origin and emplacement of ultramafic rocks is important to the United States, as well as Yugoslavia, because they are sources of chromite, nickel, platinum, magnesite, asbestos, and other economic minerals. This project will help establish exploration guidelines for these minerals and criteria for interpreting the significance of ultramafic rocks to fundamental processes of volcanism, mineralization, and crustal evolution.

Funding

The first stage of this project has been completed at a cost of $51,203. No additional work is proposed.

(5) RESEARCH ON RARE METAL MINERALIZATION

Objective of the Research

This project is intended to develop better criteria for appraising rare metal resources in granitic and associated rocks, and a better understanding of the origin and geologic associations of such deposits.

Goal of the Project

To complete detailed mineralogic, chemical, petrographic, and structural studies of granitic rocks, and associated metamorphosed and mineralized zones in the Cer and Bukulja areas of central Yugoslavia. From these studies, efforts will be made to identify the relationship between rare metal mineralization, petrographic phases of the intrusives, and structural features.

This work is a continuation of studies initiated in fiscal year 1972. It involves detailed mapping, sampling, and laboratory analysis of the rocks in selected areas within a belt of intrusive rocks that contains rare metal deposits.

Benefits

Research expertise and information concerning the rare metal province in Yugoslavia are utilized in this project to develop information and concepts that can be compared with results of similar studies in the United States. The Yugoslav rare metal province provides an opportunity to test concepts and methods that may be useful in similar provinces in the United States and elsewhere.

Funding

A total of $30,099 has been obligated for this project through June 30, 1973. $5,400 is programmed for 1974 with $10,900 programmed for completion of the project in fiscal year 1975.

(6) RESEARCH ON GEOLOGIC AND HYDROLOGIC FACTORS AFFECTING URBANIZATION AND ECONOMIC DEVELOPMENT

Objective of the Research

Methods and Techniques of geological investigation applicable to problems of reconstruction, economic and urban development in a seismically-active region will be tested under this project for comparison with and possible use on similar projects in the United States.

Goal of the Project

Project goals will be to identify and test methods that will provide coordinated geological, geophysical, and resources data needed for seismically-stable construction, urban planning, and regional development in areas severely affected by earthquakes.

This project was started in fiscal year 1972 in the Bosanska-Krajine area of Yugoslavia. Detailed geologic studies in the Bosanska-Krajine area, which was severely damaged by recent earthquakes, will be continued, with emphasis on active faulting, ground stability, and hydrologic conditions in areas especially subject to seismic damage. Compilation of resource data for construction and economic planning will be carried forward, including data on raw materials locally available for reconstruction.

Benefits

The Bosanska-Krajine area offers an opportunity to study methods, techniques, and applications of geologic research in an area of severe seismicity where economic growth and urban planning are affected by earthquake hazards similar to some areas in the western United States. This project will involve a substantial cadre of well-qualified Yugoslav geologists whose research on geologic and hydrologic effects and their minimization is a contribution to the future development of the region and a means of testing methods and techniques useful in the United States. It should serve as a model that can be applied in other areas.

Funding

This project is scheduled for completion in fiscal year 1976. A total of $100,100 has been obligated through June 30, 1973. Projected future year obligations are: Fiscal Year 1974, $43,100; fiscal year 1975, $29,800; fiscal year 1976, $34,000.

(7) RESEARCH ON APPLICATIONS OF GEOPHYSICS FOR DEFINING PERMEABILITY IN KARSTIC TERRAIN

Objective of the Research

Methods of study and instrumentation related to hydrologic problems in areas of cavernous rock formations will be developed and tested, and guidelines for their use in engineering projects will be prepared.

Goals of the Project

Project goals will be to prove the utility of geophysical techniques for recognizing and mapping solution cavities and for determining underground water circulation by remote means.

This project is a continuation of work started in fiscal year 1972. Geophysical and supporting ground surveys will be carried out in selected areas of the Karst region, Yugoslavia, along with studies of ground water movement, involving the use of radioactive tracers. Drilling and geophysical logging of areas selected on the basis of previous work will be undertaken in fiscal year 1974 to test the applicability of geophysical methods.

Benefits

Geological Survey is currently developing new surface and subsurface geophysical instrumentation to determine the presence in voids of rocks and to locate and map solution caverns. The cavernous Karst region of Yugoslavia and the capabilities of Yugoslavia scientists can be used to develop and test equipment, techniques, and interpretations that can be applied in the U.S. for the design of dams, reservoirs, and waste-disposal systems in areas of cavernous limestone.

Funding

A total of $105,219 has been obligated for this project through June 30, 1973. $5,500 is programmed for 1974 with $15,300 proposed for completion of the project in fiscal year 1975.

(8) DESALINATION OF SALINE WATER

Objective of Research

The objective of the research is development of more efficient and economical techniques for desalination of sea and brackish waters.

Goals of the Project

The program has two major areas of effort, viz. membrane processes (reverse osmosis and osmosis) and humidification (solar distillation). In the first area the goals are to develop more productive cellulose acetate and other asymmetric membranes for reverse osmosis, and to develop membranes which will be suitable for a direct (rather than reverse) osmotic process. In the second area optimal conditions will be determined for utilization of solar energy in stills where the evaporator is separated from the heater. The practicality of using electric energy and waste heat from diesel engines will be assessed.

Benefits

Throughout the world desalination is becoming increasingly important as an alternate source of water supply for areas deficient in fresh water. The economic viability

depends on the saline water source and local conditions. An area where conditions are very favorable is the coastal regions and islands of Yugoslavia. Water-permeable karstic ground, wide dispersion of the relatively small towns, long drought periods which coincide with the main tourist season, all contribute to the inadequate fresh water supply. Some towns are still supplied by rainfall catchment, and some islands are dependent on water transport by tankers. The rapid development of the tourist economy makes the problem even more severe. In some cases any further expansion of the tourist economy is practically stopped because of the problems in the fresh water supply.

Desalination is, in some cases, the most economical or the only means of fresh water supply for some islands. The specific problem related to the conditions of the application of desalination on the Yugoslav coastal region is need for economical equipment of relatively small capacity--a need found in many areas of the United States, and, indeed, throughout the world.

Funding

A total of $42,134 has been obligated for this project through June 30, 1973, $19,400 is programmed for completion of this project in fiscal year 1974.

POLAND

Because of the fast drawdown of excess foreign currencies the Department of State, the Office of Management and Budget, and the Department of Treasury established a plan whereby the orderly use of these currencies would continue through fiscal year 1978.

The Department of Interior's share of these funds, subject to Congressional Appropriation, is as follows:

F.Y. 1974.....	$355,000
F.Y. 1975.....	192,000
F.Y. 1976.....	144,000
F.Y. 1977.....	96,000
F.Y. 1978.....	48,000

The table below reflects the Department's actual and projected use of these excess currencies:

PROPOSED FOREIGN CURRENCY RESEARCH PROGRAM IN POLAND

	F.Y. 1972 Obligations	F.Y. 1973 Obligations	F.Y. 1974 Estimate	F.Y. 1975 Estimate	F.Y. 1976 Estimate	F.Y. 1977 Estimate	F.Y. 1978 Estimate
1. Initiation of Coal Dust Explosions (Bureau of Mines)	$40,000	$44,609	$40,000	$ ---	$ ---	$ ---	$ ---
2. Trigger Barriers for Mine Safety (Bureau of Mines)	30,000	33,524	30,000	---	---	---	---
3. Coal Mine Hazards (Bureau of Mines)	40,000	45,409	40,000	---	---	---	---
4. Mineral Recovery from Desalination Brines (Saline Water)	50,000	53,527	60,000	---	---	---	---
5. Liquefaction of Coal (Bur. of Mines)	---	60,964	100,000	100,000	55,000	---	---
6. Research on Mining Hydrology (Geological Survey)	---	29,250	35,000	35,000	---	---	---
7. Research on Base Metal Deposits in Carbonate Rocks (Geological Survey)	---	---	50,000	10,000	40,000	45,000	---
8. Coal Gasification to Low-Suflur low-Btu Gas (Bureau of Mines)	---	---	---	40,000	45,000	45,000	45,000
Reserve for Fluctuation in Exchange Rates	---	---	---	7,000	4,000	6,000	3,000
Total	160,000	267,283	355,000	192,000	144,000	96,000	48,000

(1) INITIATION OF COAL DUST EXPLOSIONS

Objective of Research

A research program initiated in the Polish experimental coal mine "Barbara" to study the initiation of coal dust explosions was bugun in fiscal year 1972 and will be completed in fiscal year 1974. This research is of mutual interest to both Poland and the United States, and the subject mine is well qualified to carry out the research.

Goals of the Project

The conduct of full scale simulated explosions has become increasingly difficult in the facilities presently available in the United States. Information from such experimental work is badly needed in the coal mine safety program in the United States. The Polish underground galleries at the experimental mine "Barbara" can be utilized to supplement and accelerate on-going research of a smaller scale in this country. The results of such tests combined with on-going research in this country should provide means for avoiding or minimizing coal dust explosions. Emphasis will be placed on the initiation and subsequent development of full scale dust explosions from weak gas explosions. Included in the program will be studies on the initiation characteristics of new type American explosives.

Benefits

The well developed Polish technology in the field of coal mine fires and explosions will provide the United States with much needed assistance in the field of fires and explosions. Specifically, the cooperative program will be geared to apply the Polish technology already developed to the dust explosion problems which exist in the United States coal mines.

Funding

A total of $84,609 has been obligated for this project through June 30, 1973. $40,000 is programmed for completion of this project in fiscal year 1974.

(2) TRIGGER BARRIERS FOR MINE SAFETY

Objective of Research

The United States and Poland have similar interests in preventing the loss of life and property from gas and dust explosions. The United States has immediate need for research and development work on barriers to arrest gas and/or dust explosions in underground coal mines. While extensive work has been done on this subject in Europe, difficulty has been experienced in the United States in developing a triggering mechanism which will insure the application of the fire extinguishant in the correct sequence of time.

Goal of the project

The goal of this project will be to find means to arrest incipient and full-scale explosions under conditions existing in American coal mines. This includes barriers utilizing various extinguishants (stone, water, chemicals) and a variety of triggering mechanisms to provide the maximum efficiency. Since the mine "Barbara" has fully instrumented galleries of sufficient lengths to stimulate gas and dust explosions of varying intensity, a specific research and development program can be developed in conference with Polish mine safety officials which will meet the long-range needs of this country. This will involve the utilization of known and new barrier techniques to arrest explosions, particularly coal dust explosions, which range from an incipient stage to a fully developed high velocity explosion which results in mine disasters.

Benefits

The development of successful barriers will make available to the American coal mining industry a new technique for alleviating one of the more significant hazards in coal mining. The cooperative effort will bring to this country the expertise of Dr. Cybulski, one of the most outstanding coal mine safety investigators in the world.

Funding

A total of $63,524 has been obligated for this project through June 30, 1973. $30,000 is programmed for completion of this project in fiscal year 1974.

(3) COAL MINE HAZARDS

Objective of Research

In fiscal year 1972 a research program was initiated in Poland to review the current European practices in a number of facets of ground control, haulage, automation, and electrical hazards. Where appropriate, specific research problems are being identified and feasible methods of approach suggested.

Goals of the Project

The specific areas of mutual interest include: Development of means for detecting impending rock failure, developing means of protecting miners at the working face from rock falls, improve design criteria for entry systems to minimize roof fall, improve materials handling methods to increase effectiveness and reduce the hazards, reduce miner exposure to hazardous conditions through automation of the mining process, and means of reducing the inherent hazards that accompany the use of electric power underground. The project involves consideration of existing European technology in underground coal mines and an evaluation of their current safety programs. Also being studied are new techniques which might be applicable to American mining systems and recommendations for their application.

Benefits

The successful development of the above mentioned information will have far-reaching and beneficial effects for both countries. Because of their relationship both to the Eastern and Western technology, it is believed that Polish scientists employed will cover a wide spectrum of coal mining technology. For the most part, such coordinated information is not presently available.

Funding

A total of $85,409 has been obligated for this project through June 30, 1973. $40,000 is programmed for completion of this project in fiscal year 1974.

(4) MINERAL RECOVERY FROM DESALINATION BRINES

Objective of Research

The objective of the research is development of economically viable process for recovery of minerals from desalination plant brines.

Goal of the Project

The goal of the project will be to enhance the economic utility of desalination plant brines for applications such as (a) anti-freezing material in liquid and solid form; (b) recovery of magnesium compounds as refractory materials; (c) recovery of mixtures of sodium and magnesium compounds for industrial purposes; and (d) conceptual studies for mother liquors from a full-scale plant.

Technology has been developed on a laboratory scale to produce crystalline salt, gypsum, and purified water from saline mine drainage waters by an evaporative process which does not require chemical pretreatment. Pilot plant scale studies are being carried out, and a full-scale unit for one mine is under construction. This process yields a brine concentrated with magnesium salts. The subject investigation is concerned with the recovery and utilization of salts from this brine.

Benefits

Throughout the world desalination is becoming increasingly important as an incremental source of water supply. As generally practiced, a saline feed water is processed into an essentially pure product water stream, and a concentrated brine stream which is discharged. As desalination grows, the ecological impact of brine discharge becomes a problem of great magnitude with regard to its possible deleterious effect on the local environment. The long-range solution to this problem is to recover the salts in useful form rather than to discharge them. Unfortunately, at the present time, recovery of salts in useful form from a desalination plant involves costs which exceed their value. However, legislative restrictions on disposal and reevaluation of disposal costs to include environmental impact are causing disposal costs to rise, while technological advances are giving lower recovery costs. Thus the economic viability of recovering minerals (solid salts) from desalination plants will become increasingly favorable and will cross the break-even point at a point in time which will be dependent on widely variable local conditions.

A locality where conditions are now favorable is the upper Salesia district, where mining of coal is an important industry. The coal mines are located near small tributaries of the Odra and Vistula rivers in a region of limited fresh water supply. One of the largest sources of pollution of these rivers is saline drainage from coal mines. Use of the river water in upper Silesia is limited by its waste content. A desalination project has been undertaken to protect the streams and rivers from excessive pollution, by isolating and recovering dry salts from these brines. This will prevent major pollution of the two river basins, and the technology developed will be available for application throughout the world. It will provide an additional source of water supply at lower cost, an additional source of minerals (salts), and prevent further degradation and pollution of existing water sources.

Funding

A total of $103,527 has been obligated for this project through June 30, 1973. $60,000 is projected for completion of this project in fiscal year 1974.

(5) LIQUEFACTION OF COAL

Objective of Research

A program was initiated in fiscal year 1973 which will permit experiments in coal liquefaction which is of equal interest to Poland and the United States.

Goal of the Project

This subject has been studied extensively by coal producing nations of the world for many years. The actual goal would be to make gasoline from coal at a price competitive with that obtained from petroleum. Emphasis would be placed in the critical technical bottlenecks such as filtration.

Benefits

There is a long history of developmental effort to achieve this goal in Poland and not only would we receive benefit from this earlier work, but we would benefit from on-going research. Although we are currently placing greater emphasis on gasification of coal, we would be kept abreast of current developments and profit directly from any advances made in this technology.

Funding

$60,964 was obligated for this project in fiscal year 1973 and $100,000 is programmed for fiscal year 1974. An appropriation of $100,000 is requested for the third year funding in fiscal year 1975 with an additional $55,000 needed in fiscal year 1976 to complete the project.

(6) RESEARCH ON BASE METAL DEPOSITS IN CARBONATE ROCKS

Objective of Research

This project is intended to improve the knowledge of geologic features associated with, and controlling the distribution of, base metal deposits in limestone host rocks similar to those in the Mississippi Valley region of the United States and in southern Poland and to provide better guidelines for the exploration of such deposits.

Goal of the Project

Project goals include the completion of a detailed field and laboratory study of selected base metal deposits in Poland, comparison of geologic and mineralogic characteristics with similar deposits in the United States, and identification of factors that may help in exploring and appraising such deposits.

The program of work includes compilation of existing field and laboratory data, additional field work in the deposits in Poland, analytical studies of the ores and associated rocks, and joint comparison with deposits in the United States.

Benefits

The United States contains large deposits of lead and zinc in bedded limestone in the Mississippi Valley region. These have been studied extensively but clues to the discovery and exploration of such deposits could be improved by research on comparable deposits which are of importance in Poland. This project will take advantage of the capability and knowledge that already exists in Poland to direct research on geologic features that will be helpful in understanding the U.S. deposits.

Funding

This project was delayed in fiscal year 1973 and will be initiated in fiscal year 1974 with $50,000. An appropriation of $10,000 is requested for continuation in fiscal year 1975. Future years funding includes $40,000 for fiscal year 1976 and $45,000 for completion in fiscal year 1977.

(7) RESEARCH IN MINING HYDROLOGY

Objective of Research

This project is intended to develop a better understanding of the effects of mining and tunneling on hydrologic and hydrogeochemical conditions and to improve the techniques and methodology for studying these conditions.

Goals of the Project

The project goals will be to complete a type area study of hydrologic and related hydrogeochemical conditions in a selected mining area in Poland and to evaluate the potential application of the techniques used in this study to problems in mining hydrology in the United States.

The work to be undertaken will include field studies and data compilation on the hydrology and hydrogeochemistry of a selected type mining area; detection and location using geophysical techniques of voids, portals, fractures, faults and collapse zones in concealed and abandoned mines that form avenues for water movement; tracing of water movement in and out of mines and deep mine workings using dyes and radiosotopes; and digital and analog modelling of the hydrologic regimen of the type mining area. Application of the analog and digital modelling and data analysis will be carried out in the laboratories of the Central Mining Institute in Katowice.

Benefits

The problems of anticipating patterns, direction and quantities of water outflow and of controlling water pollution from acid mine drainage in areas of mining and tunneling can be studied effectively by comparison with research on comparable problems in Polish mining districts. This project will take advantage of the research capacity already existing in Poland to obtain results in comparable problems of mining, tunneling, and related engineering projects in the United States.

Funding

$29,250 was obligated for this project in fiscal year 1973, and $35,000 is programmed for fiscal year 1974. An appropriation of $35,000 is requested for completion of this project in fiscal year 1975.

(8) COAL GASIFICATION TO LOW-SULFUR, LOW-BTU GAS

Objective of Research

With increasingly stringent legal restrictions on the amount of sulfur dioxide emitted by coal and oil-fired boilers, and with the largest reserves of low-sulfur coal long distances from the major coal markets, it is imperative that other means be found to furnish low-sulfur fuel for boilers - particularly in the electric utility industry. One promising approach is to gasify high-sulfur coals with air and steam, remove the sulfur from the raw gas, and then burn the gas in boilers, or in gas turbines, for power generation.

Goals of the Project

Coal gasification technology is well advanced, but removing the sulfur compounds from the raw gas while it is hot (500°C to 900°C), presents difficult technical problems. Currently, the Bureau of Mines is working on hot-gas desulfurization, but research by Polish engineers and scientists would complement the Bureau's work and hopefully shorten the time to the development of a low-sulfur, low-Btu gas industry based on coal.

Benefits

Efforts to develop a low-sulfur, low-Btu gas process for industrial and electrical utility use are burgeoning, but the weakest part of any such process, regardless of how the coal is gasified, is the hot-gas desulfurization step. Therefore, to

keep pace with ancillary developments of a process, it is imperative to expand and intensify work on hot-gas desulfurization as soon as possible.

Funding

This is a new project for fiscal year 1975 with an estimated cost of $175,000 over a four-year period. An initial appropriation of $40,000 is requested for the first year funding of this project. Future year funding projections include $45,000 for the 1976, 1977 and 1978 fiscal years.

ITEMIZATION OF ESTIMATE

Appropriation Title: Salaries and Expenses
(Special Foreign Currency Program) Office of the Secretary

	1973 Actual	1974 Estimate	1975 Estimate	Increase (+) or Decrease (-)
Program and Financing:				
Total obligations	$454,448	$743,238	$522,000	$-221,238
Unobligated balance, start of year	-27,686	-73,238	---	+73,238
Unobligated balance, end of year	+73,238	---	---	---
Budget Authority (Appropriation)	500,000	670,000	522,000	-148,000
Object Classification:				
25 Other services	454,448	743,238	522,000	-221,238

SALINE WATER RESEARCH

SUMMARY AND HIGHLIGHT STATEMENT

The fiscal year 1975 program for saline water desalting research and development is $4,869,020, including $1,840,020 carryover of fiscal year 1973 funds. This is a decrease of $5,833,011, from the FY 1974 program of $10,702,031 (FY 1974 appropriation $3,627,000, carryover from prior years $7,075,031).

Basic research on new desalination processes is programmed at $400,000. Research and development on membrane and freezing processes amount to $2,816,020, including operation of the test facilities at Wrightsville Beach, North Carolina, Roswell, New Mexico, Fountain Valley, California, and Yuma, Arizona. Operation and maintenance of the Vertical Tube Evaporator/Multi-stage Flash Module (VTE/MSF) at Fountain Valley, California, is budgeted at $588,000. Program administration, including reimbursement to the General Services Administration for space costs, totals $1,065,000.

The FY 1975 program will be directed toward advancing membrane and freezing processes technology for sea and brackish water conversion, investigating promising new processes, and continuing operation of the VTE/MSF module.

Appropriation, 1974		$ 3,627,000
Unobligated balance:		
Start of Year	8,915,051	
End of Year	-1,840,020	7,075,031
Total Available, 1974		$10,702,031

Summary of Increases and Decreases, 1975

Research and Development:		
Research expense (decrease)	-1,000,000	
Development expense (decrease)	-1,508,960	
Construction, operation and maintenance:		
Test beds and facilities (decrease)	-1,130,000	
Modules (decrease)	-1,603,051	
Administration and Coordination (decrease)	- 591,000	
Net decrease, 1975		$-5,833,011
Total available for obligation		4.869,020
Less: Unobligated balance from FY 1974		-1,840,020
Budget Estimate, 1975		$ 3,029,000

Saline Water Research

Analysis by Budget Activities

	Actual Obligations 1973	Amount Available 1974	Fiscal Year 1975			Total available 1975 compared to total available 1974
			Estimated total Available	Unobligated Balance from 1973	Budget Estimate	
I. Research & Development Expenses:						
(a) Research	$ 3,798,275	$ 2,600,000	$ 1,600,000	$ 1,600,000	$ -0-	$-1,000,000
(b) Development	9,103,218	2,074,980	566,020	66,020	500,000	-1,508,960
II. Construction, Operation & Maintenance:						
(a) Testbeds & facilities	4,124,865	2,180,000	1,050,000	174,000	876,000	-1,130,000
(b) Modules	742,263	2,191,051	588,000	-0-	588,000	-1,603,051
III. Administration & Coordination:	2,452,440	1,656,000	1,065,000	-0-	1,065,000	- 591,000
Totals	$20,221,061	$10,702,031	$ 4,869,020	$ 1,840,020	$ 3,029,000	$-5,833,011

PERSONNEL SUMMARY

	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions	78	70	29
Full time equivalent of other positions	13	6	6
Average paid employment	138	73	35
Average GS grade	11.9	11.4	13.1
Average GS salary	$21,565	$22,765	$26,198
Average salary of ungraded positions	$12,081	-0-	-0-

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ITEMIZATION OF ESTIMATE

Department of the Interior

Appropriation Title: Saline Water Research

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) Decrease (-)
Program and Financial:				
Total obligations	$20,221,061	$10,702,031	$4,869,020	$-5,833,011
Receipts & reimbursements from Federal funds (-)	- 61,081	---	---	---
Unobligated balance available, start of year	- 2,204,031	- 8,915,051	-1,840,020	+7,075,031
Unobligated balance available, end of year	8,915,051	1,840,020	---	-1,840,020
Budget Authority	$26,871,000	$ 3,627,000	$3,029,000	$- 598,000
Obligations by Objects:				
11 Personnel compensation	$ 2,655,195	$ 1,683,000	$ 818,000	$- 865,000
12 Personnel benefits	239,533	139,000	64,000	- 75,000
13 Benefits for former personnel	27,535	36,000	167,000	+ 131,000
21 Travel and transportation of persons	155,093	135,000	115,000	- 20,000
22 Transportation of things	65,513	90,000	25,000	- 65,000
23 Rent, communications and utilities	633,508	1,100,000	961,000	- 139,000
24 Printing and reporduction	88,314	100,000	75,000	- 25,000
25 Other services	15,906,035	7,319,031	2,364,020	-4,955,011
26 Supplies and materials	206,973	100,000	80,000	- 20,000
31 Equipment	184,808	---	200,000	+ 200,000
32 Land and structures	58,554	---	---	---
Total Obligations	$20,221,061	$10,702,031	$4,869,020	$-5,833,011

I. (a) RESEARCH EXPENSE

This activity includes basic and applied research on: new separation processes, structural features in membranes, new and improved seawater membranes, unit operations, and effects on the environment. The following table provides a comparison by program for the Fiscal Years 1974 and 1975.

Program	(In thousands) Available FY 1974	Requested FY 1975	Increase (+) or Decrease (-)
Research	$2,600	$1,600	$ - 1,000
Fundamental Research	900	400	- 500
Seawater Desalting Research	1,700	1,200	- 500

An explanation of the decreases follows:

Fundamental Research: Fiscal Year 1974, $900,000; Fiscal Year 1975, $400,000; decrease, $500,000. The decrease consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$-500,000	---	$400,000	---	Due to dropping a number of exploratory projects.

The decrease of $500,000 results from non-renewal of certain investigations involving polymer solvation, piezodialysis, flux, rejection, and fouling on membranes.

Fundamental research supplies data and information applicable to all separation processes. The program for FY 1975 provides for limited investigations into new desalting processes.

Seawater Desalting Research: Fiscal Year 1974, $1,700,000; Fiscal Year 1975, $1,200,000; decrease, $500,000. The decrease consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$-400,000	---	$1,000,000	---	Due to reduced effort of laboratory synthesis of certain seawater membranes.

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(2)	$-100,000	---	$ 200,000	---	Due to nearing completion of research on two freezing processes.
	$-500,000				

(1) The decrease of $400,000, is due to a reduction in level of effort on research and laboratory synthesis of composite and asymmetric membranes for seawater application.

(2) The decrease of $100,000, is due to plans tc phase out the research effort on the secondary refrigerant process.

The major effort in FY 1975 will be devoted to the further development of:
(a) several specific non-cellulosic and improved composite membranes for application in spiral wound, hollow fine fiber or tubular form, and the development of a universal seawater pretreatment system; and,
(b) eutectic freezing and hydrate processes, thin channel freezing, and modified crystallization processes.

I. (b) DEVELOPMENT EXPENSE

This activity includes programs involved in the engineering development of desalting processes.

Program	(In thousands) Available FY 1974	Requested FY 1975	Increase (+) or Decrease (-)
Development	$2,075	$ 566	$-1,509
Seawater Desalting	1,315	466	- 849
Brackish Water Desalting	760	100	- 660

An explanation of the decrease follows:

Seawater Desalting Development: Fiscal Year 1974, $1,314,980; Fiscal Year 1975, $466,020; decrease, $848,960.
The decrease consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$-483,960	---	$466,000	---	Due to reduced effort on membrane processes development.
(2)	$-365,000	---	$ -0-	---	Due to termination of secondary freezing process development.
	$-848,960				

(1) The decrease of $483,960, is due to reduction in membrane pilot plant operations at the Wrightsville Beach Test Facility.

(2) The decrease of $365,000, is due to termination of the secondary refrigerant pilot plant operations at the Wrightsville Beach Test Facility.

The FY 1975 seawater desalting development program includes:

(a) Pilot Plant Operations and Modifications

The thrust in this area is to develop through pilot plant testing, a viable method of desalting sea water to potable water conditions using membrane processes. It is projected that membrane desalting plants require less energy, decreased land area, and relative ease in adding incremental production capacity as compared to other desalting systems. At the present time, small membrane assemblies are in operation to produce potable water from sea water. Improved membranes and components are in the developmental stage. The major problem is to develop a complete system whereby operating data can be obtained over a sustained period and preliminary system economics can be established. Development is directed toward both one- and two-pass systems wherein sea water can be desalted through a single membrane system or two systems in series. Various membrane configurations are under investigation with the near-term goal of narrowing down to those which appear to have maximum economic promise. The membrane system includes the membranes themselves, support structures, pumps, pretreatment systems, controls, instrumentation and all auxiliaries. Testing will be conducted primarily at Wrightsville Beach, North Carolina.

(b) High Volume Assembly Development

The present sea water membrane desalting development program is directed toward testing of small assemblies or "modules" since it is necessary to establish membrane performance before component growth can be considered. Based on past investigations, however, increased assembly size will reduce water cost since there are less component interconnections and output per unit volume is increased. Therefore, the approach is to develop larger assemblies and to place these on test as soon as possible. The major problem in scale-up

is to develop fabrication procedures and large components which will have high pressure integrity. Of major importance is the achievement of acceptable system hydraulics. Work has been initiated on the design of larger assemblies and they will be placed in operation with a complete desalting system after individual check-out in a natural sea water environment.

Brackish Water Desalting Development: Fiscal Year 1974, $760,000; Fiscal Year 1975, $100,000; decrease, $660,000. The decrease consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$- 30,000	---	$100,000	---	Due to reduction in membrane pilot plant operations at the Roswell Test Facility.
(2)	$-335,000	---	$ -0-	---	Due to termination of newly evolved membrane developments.
(3)	$-115,000	---	$ -0-	---	Due to discontinuing membrane process development at Yuma, Arizona.
(4)	$-180,000	---	$ -0-	---	Due to completion of Wellton-Mohawk plant design studies.
	$-660,000				

(1) The decrease of $30,000, is due to the program redirection initiated in FY 1973. Funding in FY 1975 is required to complete testing of present units and assemblies at Roswell.

(2) The decrease of $335,000, is due to the planned FY 1974 termination of development of previously evolved new membrane systems.

(3) The decrease of $115,000, is due to the planned one-year period of testing at Yuma, Arizona, in support of proposed bids on the Wellton-Mohawk project. FY 1974 funding will carry into FY 1975. Further developmental requirements will be conducted under the proposed Wellton-Mohawk (Colorado River International Salinity Control) program budget.

(4) The decrease of $180,000, is due to the use of FY 1974 funding for early FY 1975 completion of preliminary engineering design studies for the Wellton-Mohawk plant.

II. (a) DESIGN, CONSTRUCTION, ACQUISITION, MODIFICATION, OPERATION AND MAINTENANCE OF SALINE WATER CONVERSION TEST BEDS AND TEST FACILITIES

In FY 1975, desalting development plant activities will be conducted at four locations. The four facilities, Wrightsville Beach, North Carolina, Roswell, New Mexico, Yuma, Arizona, and Fountain Valley, California, provide the necessary support functions for the developmental operations. Two facilities (San Diego, California and Freeport, Texas) previously operated are now in the process of being closed out.

Following is an analysis of funds available in Fiscal Year 1974 and requested for Fiscal Year 1975 for this activity.

	(In thousands)		
	Available FY 74	Requested FY 75	Increase (+) or Decrease (-)
Wrightsville Beach, North Carolina	$ 800	$ 250	$ - 550
Fountain Valley, California	300	300	- 0
Yuma, Arizona	380	-0-	- 380
Roswell, New Mexico	500	500	- 0
Other Facilities being closed out	200	-0-	- 200
	$ 2,180	$ 1,050	$- 1,130

Wrightsville Beach, North Carolina, Test Facility: Fiscal Year 1974, $800,000; Fiscal Year 1975, $250,000; decrease, $550,000. The decrease consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $-400,000		$ 0	---	Due to completion of alterations.
(2) $-150,000	- 9	$ 250,000	1	Due to reduction in pilot plant operations.
$-550,000	- 9			

(1) The decrease of $400,000, is due to completion of modifications to the facility required in FY 1974 in order to convert from support of distillation processes to membrane processes. Closing out the San Diego Test Facility and the increased emphasis on seawater membrane desalting development, made it necessary to establish the Wrightsville Beach facility as the center for membrane process development.

(2) The decrease of $150,000, and 9 positions results from reduction in pilot plant operations requiring less support.

The FY 1975 program covers logistic support of pilot plant operational development evaluation. Costs include laboratory services, utilities, maintenance, chemicals, and spare parts.

Fountain Valley, California, Test Facility: Fiscal Year 1974 $300,000; Fiscal Year 1975, $300,000; no change.

Delays in the availability of supporting facilities (being supplied by the Orange County Water District) in FY 1974 resulted in the contract period carrying the program to mid-FY 1975.

Funding in FY 1975 is required to complete the financing of the facility operations and maintaining one (1) position in support of Water Factory 21.

Yuma, Arizona, Test Facility: Fiscal Year 1974 $380,000; Fiscal Year 1975, $0; decrease, $380,000. The decrease consists of:

Increase (+) or Decrease (-)		Total	Total	
Amount	Positions	Program	Positions	Explanation
$-205,000	-1	$ 0	---	Due to funding requirement restrictions.
$-175,000	---	$ 0	---	Due to completion of facility modification.
$-380,000	-1			

The decrease of $205,000, and one (1) position is due to the requirement that testing in FY 1975 be funded under the Wellton-Mohawk (Colorado River International Salinity Control) program budget.

The decrease of $175,000, is due to the completion of facility modifications required to support tests by manufacturers at Yuma.

Roswell, New Mexico, Test Facility: Fiscal Year 1974, $500,000; Fiscal Year 1975, $500,000; no change.

In order to complete the development testing of pilot plants and membrane desalting assemblies which would yield decreased cost and higher product recoveries of the Wellton-Mohawk plant, operation of the Roswell Test Facility and the maintenance of one (1) position will be required during FY 1975 at the same level as 1974.

Other Facilities: Fiscal Year 1974, $200,000; Fiscal Year 1975, $0; decrease, $200,000. The decrease consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$-200,000	-1	$ 0	-0-	Due to non-recurring close out costs at San Diego, California.

The decrease of $200,000, and one (1) position is due to closing out and restoring the facilities at San Diego, California. The module tear-down funding (see Item II(b)) plus the $200,000 for the other tear-down at San Diego may be sufficient for the total facility.

The Freeport, Texas, VTE/MSF test bed has been dismantled.

II. (b) DESIGN, CONSTRUCTION, ACQUISITION, MODIFICATION, OPERATION, AND MAINTENANCE OF SALINE WATER CONVERSION MODULES

Saline Water Conversion Modules are sections of prototype plants which simulate the operation of a complete plant and confirm essential design features. This program is now carried on at the Fountain Valley, California, Test Facility.

A. Modules: Fiscal Year 1974, $2,191,000; Fiscal Year 1975, $588,000; decrease, $1,603,000. The decrease consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$-375,000	--	0	--	Due to non-recurring tear down costs of MSF module at San Diego.
(2)	$-1,228,000	--	$588,000	--	Due to reduced FY 1975 funding requirements.
	$-1,603,000				

(1) The drecrease of $375,000, is due to non-recurring costs involved in tear-down of the Multi-Stage Flash (MSF) Module at San Diego, California.

(2) The decrease of $1,228,000, is due to the M.O.M. contract period funded in FY 1974 extending into FY 1975. The budgeted $588,000 provides for the remaining FY 1975 costs of M.O.M. necessary to conduct the operational development evaluation of the VTE/MSF Module (Orange Counry Project).

III. ADMINISTRATION AND COORDINATION

Administration and Coordination: Fiscal Year 1974, $1,656,000; Fiscal Year 1975, $1,065,000; decrease, $591,000. The decrease consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$-691,000	- 30	$ 965,000	26	Due to decreased employment
$+100,000	---	$ 100,000	---	Reimbursement to GSA for space costs.
$-591,000	- 30			

(1) The decrease of $691,000 is due to the anticipated reduction of 30 positions in this activity due to the phased redirection of the Saline Water program.

(2) The increase of $100,000 is to provide for reimbursement for space, services and facilities provided by GSA in accordance with Public Buildings Amendments of 1972, P.L. 92-213.

The program for FY 75 covers administration and coordination activities authorized under the Saline Water Conversion Act of 1971. Included are planning, supervisory, technical and administrative functions related to research and development contracts and grants.

Approximately one hundred and ninety (190) research and development agreements, contracts and grants are outstanding. Ninety-seven (97) contracts and grants, totaling approximately $17.3-million, are active requiring close technical and administrative supervision and monitoring until the results are in usable form for dissemination to the public; the balance is open subject to audit, financial and property settlements. The planned reduction of program activities and ending of many research and development projects must be carried out in an orderly manner, to obtain optimum benefit from the government's investment in the saline water research and development program. A minimum staffing of 26 personnel is required for this activity in FY 1975.

DEPARTMENT OF THE INTERIOR
OFFICE OF THE SECRETARY
ENERGY CONSERVATION AND ANALYSIS

Highlight Statement

The fiscal year 1975 appropriation request for the account "Energy Conservation and Analysis" is $27,900,000. This is an increase of $19,600,000 over the $8,300,000 appropriated to the Office of the Secretary's "Salaries and Expenses" account for fiscal year 1974.

Although these programs are included with the Office of the Secretary, they are scheduled to be transferred to the Federal Energy Administration upon enactment of pending legislation.

This appropriation account is composed of the following activities:

- Office of Energy Conservation - for which $22,900,000 and 42 positions are requested for fiscal year 1975. The objectives of this office are to promote efficiencies in the use and development of energy resources, coordinate Federal energy conservation programs, conduct research for methods of improving the efficiency of energy usage and develop a broad public awareness program of the need for energy conservation.

- Office of Energy Data and Analysis - for which $5,000,000 and 90 positions are requested for fiscal year 1975. The objectives of this office are to collect and assemble information with respect to energy reserves, production and demand in all sections, perform analyses, and identify energy policy and program options.

Appropriation/Total available, 1973	$ -0-
Appropriation/Total available, 1974	-0- 1/

Summary of Increases and Decreases, 1975

Office of Energy Conservation:		
F.Y. 1974 base level of program previously included under "Salaries and Expenses"	$5,900,000	
Annualization of fiscal year 1974 supplemental (staff costs)	400,000	
Accelerated Energy Conservation R&D program	16,600,000	
Total Program		22,900,000
Office of Energy Data and Analysis:		
F.Y. 1974 base level of program previously included under "Salaries and Expenses"	2,400,000	
Annualization of fiscal year 1974 supplemental (staff costs)	500,000	
Discontinuance of Bureau of Mines reimbursements	400,000	
Program increase	1,700,000	
Total Program		5,000,000
Budget estimate, 1975		27,900,000

1/ $8,300,000 is included in the "Salaries and Expenses", Office of the Secretary's account for this program for fiscal year 1974.

DEPARTMENT OF THE INTERIOR
OFFICE OF THE SECRETARY

Summary of Energy Research and Development Analysis 1/
Energy Conservation and Analysis

Activity	F.Y. 1974 Amount Available	F.Y. 1975 Regular Budget Request	F.Y. 1975 Budget Amendment H.D.	F.Y. 1975 Total Request	Increase (+) or Decrease (-) 1975 Compared with 1974
Office of Energy Conservation.....	$ ---	$10,000,000	$12,900,000	$22,900,000	$+22,900,000
Office of Energy Data and Analysis..	---	5,000,000	---	5,000,000	+5,000,000
Total.....	---	15,000,000	12,900,000	27,900,000	27,900,000

1/ This table shows the relation of the fiscal year 1975 budget amendment for the accelerated energy R&D program to the fiscal year 1975 regular budget request and the fiscal year 1974 amount available.

Energy Conservation and Analysis
Analysis by Activity

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
Office of Energy Conservation.....	$ ---	$ ---	$22,900,000	$+22,900,000
Office of Energy Data and Analysis.	---	---	5,000,000	+5,000,000
Total.....	---	---	27,900,000	+27,900,000

1. OFFICE OF ENERGY CONSERVATION

Office of Energy Conservation: Fiscal year 1974, $0-; fiscal year 1975, $22,900,000; increase, $22,900,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+5,900,000	39	$22,900,000	42	Base level transfer.
(2)	+400,000	--	---	--	Supplemental annualization.
(3)	+16,600,000	3	---	--	Increased staff and contract funds.
	22,900,000	42			

Cost Factors Involved in Increases

(1) Base level of program previously included in the Secretary's "Salaries and Expenses" account.

(2) Annualization of supplemental (staff costs for fiscal year 1974).

(3) Program expansion, 3 positions @ $30,000 and $16,510,000 in accelerated Energy Conservation R&D Program.

The purpose of the Office of Energy Conservation is to reduce energy demand growth as rapidly as possible under conditions of acceptable socio-economic impacts. Major functions include:

- Developing and implementing voluntary and mandatory energy conservation policies and actions for both public and private sectors.
- Developing motivational education programs on energy conservation for the American public and carry out an agressive multi-media public information and consumer awareness program.
- Managing, monitoring, and reporting on the Federal agency energy reduction program.
- Managing national mandatory conservation programs.
- Providing technical assistance on energy conservation to state, local governments, and others including Federal agencies and the Congress.
- Evaulating the success of conservation actions.
- Acting as "lead agency" in conducting and managing the Federal R&D program in end-use energy conservation.

Background

Independent of the crisis caused by the oil embargo, the United States faces a serious energy problem. While we account for only six percent of the world's population, we consume one-third of the world's energy production. The supply of domestic energy resources is not keeping pace with rapidly growing demands. Unless we act swiftly and effectively we face an endemic energy crisis that won't be met

by short-term emergency measures to curtail demand. It can only be met by instituting basic changes in industry, buildings, transportation activities, and life styles. Such changes need not be considered as eroding quality of life; rather, they can add significantly to environmental quality and domestic economic stability. Projections of energy demand indicate an increase in energy consumption from 72.1 quadrillion Btu in 1972 to 191.9 quadrillion Btu in the year 2000. The problem cannot be met simply by expanding supplies, especially in the next 10 to 15 years. Demand growth must be decreased.

Two approaches are available for slowing the rate of increase in demand for energy: (1) energy can be used more efficiently; and (2) policies can be devised for discouraging the rising demand for energy. An example of the former is increased insulation of buildings; an example of the latter is a fuel tax designed to discourage consumption.

Improved efficiency of energy use is possible throughout the steps beginning with fuel resources extraction and ending with its ultimate use. In addition, significant energy savings are possible, for example, through better product design, manufacturing techniques and reuse of certain materials. The Office of Energy Conservation (OEC) develops information through technical research and economic, institutional, and policy analysis, that clarifies these opportunities for energy savings and communicates the results to public agencies and government, industry and the public.

In his April 18, 1973, energy message, President Nixon directed that an Office of Energy Conservation be established in the Department of the Interior to coordinate the energy conservation programs presently scattered throughout the Federal establishment. The Office was also directed to conduct research and work with consumer groups in their efforts to educate consumers on ways to save energy.

On May 7, 1973, Secretary Morton established within the Department of the Interior an Office of Energy Conservation to promote efficiencies in the use and development of energy resources; coordinate all Federal energy conservation programs; conduct research for methods of improving the efficiency of energy usage; and to develop a broad awareness of the need for energy conservation.

On June 29, 1973, the President directed the Federal government to achieve a seven percent reduction in its own anticipated energy consumption over the next twelve months in order to set an example for the nation. He also directed all Federal departments and agencies to work on the development of long-term energy conservation plans and recommendations for both the private and the public sector. In addition, the President challenged the nation to achieve a five percent energy savings over fiscal year 1974. These objectives are developed, monitored, and reported by the Office of Energy Conservation.

In October, 1973, the OEC was assigned lead agency responsibility for managing end-use energy conservation R&D funds supplied by the President's $115 million fiscal year 1974 supplemental energy budget.

Organization

The OEC is organized in three line divisions -- Voluntary and Mandatory Programs; Policy Evaluation and Implementation; and Research, Development and Demonstration.

A. Division of Voluntary and Mandatory Programs - The Division of Voluntary and Mandatory Programs is the interface and implementation mechanism for FEO on Federal programs and actions which require the compliance, cooperation, and education of the general public, private institutions, and the nation's elected officials. The Division initiates programs and activities to induce public and private sector actions in support of the Administration's energy conservation program. The Division's activities are structured to address short - and long-term energy

demand problems (winter 1973-1974, changing one to ten year demand patterns through public education). The Division manages and coordinates Federal, state and local, public energy conservation demand reduction programs; implements mandatory energy conservation programs; ensures Federal agency compliance with existing and new Executive Orders, regulations, and legislation regarding energy conservation, including requiring the development of constituency and contractor energy savings programs.

Fiscal Year 1974 Program Objectives

The Division of Voluntary and Mandatory Programs (V&MP) have the lead roles in FEO in initiating programs and activities which are designed to induce public and private sector action in support of the President's national energy conservation program; the Mandatory Division coordinates the Federal agency energy reduction programs and implements new measures as they are approved by FEO; V&MP established and manages the state and local government program which began as an effort to persuade states and cities to begin voluntary energy conservation programs and has since become a sophisticated, responsive communication mechanism to provide feedback and to permit rapid dissemination of FEO information and rulings to senior elected officials.

The Division of Voluntary Programs has two branches: Public Education and Information, and State and Local Government Programs.

The Division of Mandatory Programs has two branches: Federal Energy Reduction Programs and National Mandatory Energy Conservation Programs.

Public Education and Information Branch - National advertising program (contract with the Advertising Council, Inc., Cunningham & Walsh advertising agency). All media campaign with emphasis on television and radio. Outstanding success during first few months of program (NFL championship games, Super Bowl, prime-time evening television).

Preparation and mass mailings of materials on energy conservation, including Congressional, elected official and private sector correspondence requiring nonroutine action (fact sheets, booklets, backgrounders, speeches, Presidential messages, and FEO action papers).

Special Projects: as per instructions (Executive Order, FEO Administrator) to work closely with Federal agencies to institute broad constituency EC programs. Examples include a Civil Service Commission Federal employee and agency EC awards program, including cash awards; HEW school and teacher programs; GSA driver awareness program; White House EC press conference, special briefings and seminars.

State and Local Government Programs Branch - Begun in the fall of 1973, this program followed up promptly on Presidential and FEO initiatives in energy conservation among the states, counties, municipalities, regional governors' conferences. The emphasis is on voluntary compliance with Federal energy conservation recommendations, including those which have/would become mandatory with the passage of enabling legislation (speed limits, temperature settings, insulation, exterior and interior lighting, and the like). In addition, the program includes daily contact with elected officials and their representatives (resulting in periodic 50 state summary reports on current energy conservation state and local programs); arranging seminars and conferences to permit leading Federal energy personnel to confer with these elected officials; obtain support for additional energy saving measures, gain insight into local problems and conflicts that could have injurious impact on Federal energy conservation efforts.

The program has been instrumental in assisting the National Governors' Conference and the National League of Cities in establishing energy conservation programs.

Federal Energy Reduction Program Branch - Beginning with the President's announcement (June 29, 1973) this program has attempted to make significant savings in Federal energy use (buildings, facilities, fleet and aircraft operations; purchasing practices, Federal contracting, executive and employee work habits). With a fiscal year 1974 goal of seven percent curtailment, first quarter results (20.6 percent reduction) and anticipated progress during the full fiscal year, OEC is encouraged that the savings goal can be set even higher. Management of the program during the remainder of the fiscal year will emphasize deeper cuts in Federal energy consumption (new programs, field surveys, training programs, new measures).

There are more than 80 departments and agencies within the Federal government. Together, they consume nearly three percent of all the energy consumed in the nation. The 11 Cabinet-level departments plus five independent agencies own 97 percent of the government's vehicles, employ 98 percent of all Federal personnel, and occupy 99.7 percent of the Federal buildings, both owned and leased.

Fiscal Year 1975 Program Objectives - Division of Volunatry Programs

State and Local Government Conservation Programs Branch - The Branch will have the lead role in promulgating energy conservation measures with the non-Federal public sector, i.e., state voluntary actions, opinion leader surveying, conferences and seminars, Congressional support activities.

Work with RD&D Division, OEC, to design research programs to help facilitate and promote public and private sector voluntarism in energy conservation. The Branch will be a focal point for information feedback in designing and adding new OEC programs in public education, policy studies, research proposals; in getting progress reports on existing OEC and FEO programs (outside of the allocation and supply control activities).

The Branch will have the responsibility to interface with the private and public sectors, generally, on non-supply control activities. It will conduct demonstration programs eminating from research and special studies performed by OEC and FEO where the emphasis is on rapid broad dissemination geographically and among various publics; support of the National Governor's Conference, National League of Cities. ($500,000 in contract funds for this program).

Public Education and Information Branch - This Branch has as its principal focus the daily, intensive dissemination of information on energy and energy conservation to the private sector. Included in the education and information programs are advertising, printed and published materials, visuals, films, television and radio scripts and telops, fact sheets and special presentations for conferences, seminars, and the like.

The nation's mass media will receive heavy attention in disseminating the program. Included will be an extensive speakers' placement program which will seek opportunities for OEC and FEO representatives to highlight the Administration's energy conservation and demand management programs.

The Branch will conduct public opinion research on a continuing basis to assist in providing FEO with guidelines in making decisions regarding the impact of programs and proposed actions on the private sector.

The fiscal year 1974 outreach program will be expanded, including the introduction of materials specifically requested by the Congress for mass distribution through mailings and distribution centers.

The Branch will develop and offer new energy conservation communications to selected groups (the Congress, opinion leaders, elected officials, academia, Federal executives).

The activity will seek vigorously to induce Federal agencies to develop constituency and contractor programs designed to further energy conservation progress in the nation. Examples (in fiscal year 1974) include the Civil Service Commission's Federal Awards Program, DOC's business and industry program and HEW's teacher and student EC kit program.

The Branch will seek out new opportunities including joint venturing with other Federal agencies. ($1 million in contract funds for the project).

Division of Mandatory Programs

National Programs Branch - Implement Federal policies and measures to reduce the consumption of energy.

Establish field network in FEO regions to ensure compliance with the mandatory conservation program in states, cities, with industry and the public. Prepare and forward compliance evaluation reports to the Division's Washington, D. C. headquarters.

Assist in developing programs within the 50 states through the governors' offices (local measures, training, advice on funding, staffing levels).

Provide information transfer from OEC to states, local government, industry and universities (research and demonstration programs, studies, regulations).

Washington staff will ensure program implementation through the field network; work with national governors' and cities' organizations to facilitate compliance by state and local government; work with Policy Evaluation and Implementation Division, OEC, to plan new mandatory measures; conduct national and regional seminars to provide forums to convey follow-on and proposed actions, obtain understanding of and support for, the total mandatory program; interface with other Federal agencies and the Congress including making periodic progress reports to the Administration and the Congress, prepare testimony and publish reports to the nation. Division management will staff, supervise, and evaluate the field organization, working with the FEO regional directors.

Federal Energy Reduction Program Branch - Coordinate the on-going Federal Energy Reduction Program including the management of existing and add-on systems. Measure results quarterly and on a spot basis;

Develop new Federal energy conservation measures and introduce them into the Federal program. Work with OEC RD&D to increase Federal incentives in energy conservation;

Work in close support of energy conservation units (mandatory conservation field organization) located in the FEO 10 regional offices.

Emphasize instructional and problem-solving visits to Federal installations in the Field to assist agencies in meeting energy conservation goals. ($100,000 in contract funds for this project).

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B. Policy Evaluation and Implementation Division - The Policy Evaulation and Implementation Division functions are:

- Recommend and defend specific actions, initiatives, and public policies to improve energy conservation in all public and private sectors, including both mandatory and voluntary programs.

- Conceive and carry out research and development on policy alternatives (e.g., regulations, pricing, labeling, procurement practices, etc.)

- Evaluate technical, economic, social and political impacts of specific energy conservation tactics.

- Evaluate effectiveness of current national energy conservation programs and develop broad policies for research, analysis, and actions.

- Implement policy decisions on voluntary and mandatory energy conservation measures by preparing requisite engineering/legal mandates, rules, regulations, memos, Executive Orders, legislative drafts, etc.; hold public hearings, review and respond to public comment on proposed actions.

- Effect necessary liaison with other agencies, intra-FEO, OMB, Congress, etc., to provide maximum degree of consensus prior to implementation of energy conservation policies.

- Monitor and respond to programs developed by other agencies which may impact on energy demand.

- Receive, coordinate and respond to external requests for assistance in evaluating near term policy initiatives that affect energy demand.

- Assist in preparation of testimony, signing statements, fact sheets, etc., and office comment on energy related proposed legislation.

- Conduct an annual internal audit on the effectiveness of OEC operations and of public policies stemming from the Office.

The work performed by the Division requires extensive coordination with all Divisions of the Office and involves continuous inter-agency activities. Much of the evaluation and analysis work in conducted by contract, some by the Division itself, and some by other agencies.

Fiscal Year 1975 Activities

The Division will be disaggregated into two branches for fiscal year 1975: Policy Evaluation Branch and Implementation Branch.

The Policy Evaluation Branch will perform the following functions:

1. Recommend and defend specific actions, initiatives, and public policies to improve energy conservation in all public and private sectors, including both mandatory and voluntary programs.

2. Conceive and carry out research and development on policy alternatives (e.g., regulations, pricing, labeling, procurement practices, etc.)

3. Evaluate effectiveness of current national energy conservation programs and develop broad policies for research, analysis, and actions.

For each policy initiative, three kinds of studies will be conducted:

a. Technical studies:

- what technical opportunities for energy conservation exist?

- What are the potential energy savings of each, and on what time scale?

- is the technology available?

b. Economic studies:

- what are the capital and operating costs and trade-offs of each alternative?

- what is the value of the potential energy savings?

c. Policy studies:

- what policy mechansisms would be most effective in ensuring potential savings are realized (e.g., incentives, regulations, consumer education, research and development)?

- what kind of government program would be required to implement such a mechanism and what Federal agency would administer the program?

- do the benefits of such a program (both direct benefits as energy savings and indirect as environmental improvement) warrant the costs (both direct investment and operating costs and indirect as price increases and unemployment)?

The Branch will evaluate the integrate existing technical and economic information about a given energy conservation opportunity and determine alternative mechanisms for converting the opportunity into an action.

The Implementation Branch will perform the following functions:

1. Implement policy decisions on voluntary and mandatory energy conservation measures by preparing requisite engineering/legal mandates, rules, regulations, memos, Executive Orders, legislative drafts, etc.; hold public hearings, review and respond to public comment on proposed actions.

2. Manage the implementation of energy conservation policy recommendations. Effect necessary liaison with other agencies, intra-FEO, OMB, Congress, etc., to provide maximum degree of consensus prior to implementation of energy conservation policies.

The following are the evaluation and analysis contractual requirements for the Division:

Procurement Practices and Regulations..... $500,000

Research energy conservation opportunities through alternations in public agency procurement practices and regulations. Fiscal year 1974 effort was focused on vehicles and air conditioners. Fiscal year 1975 program will seek to expand on this effort, e.g., lighting fixtures, energy intensive materials, building standards, etc.

Policy Research..... $1,400,000

Research will be conducted on various policy matters such as: development of specific policy options; the role of regulation; information system requirements; role of education; labeling; consumer response to voluntary and mandatory programs; limits to voluntarism.

Energy Pricing Policies..... 800,000

Research on optimal strategies on using pricing as a means to control energy demand (electricity, fuels). We will also study the comprehensive effects of pricing on labor and production.

Options for Further Expansion of Voluntary and Mandatory Energy Conservation Programs..... 500,000

3,200,000

C. Research, Development, and Demonstration -

Program Objectives

The Research, Development, and Demonstration (RD&D) Division is responsible for conceiving and carrying out interdisciplinary research, development, and demonstrations to stimulate end-use energy conservation. Division activity is technical, economic, social, and institutional and carries across industrial, buildings (commercial/residential), and transportation sectors and systems studies areas. The specific research objectives are as follows:

1. To develop and demonstrate techniques that improve the energy performance of buildings and residences (design and operational improvements).

2. To develop and demonstrate consumer incentives and techniques that shift demand to more efficient transportation modes for people and goods, for both urban and inter-city travel.

3. To develop and demonstrate innovations that can improve the efficiency of industrial processes and encourage their generalized introduction throughout the economy.

4. To develop and demonstrate long term technical and management innovations, in cooperation with the Voluntary and Mandatory Programs Division, to extend the Federal government energy reduction effort.

5. To research and develop integrated systems studies leading to more efficient end use energy utilization.

6. To develop methodology to assist in more completely anticipating the effects of large public works undertakings.

7. To research secondary impacts of policies whose primary purpose is to decrease energy demand.

8. To research, quantify, and generalize energy-conserving practices throughout the society.

9. To conduct demonstrations of new technologies, processes, and procedures that conserve energy usage in order to accelerate their broad adoption.

10. To cooperate with the Office of Energy Analysis in building models and analytical tools that permit better management of energy supply and demand.

11. To cooperate with the Voluntary and Mandatory Programs Division in researching consumer response to energy shortages including actual elasticity determinations and lifestyle changes to support policy development that will conserve the most energy at the least disruptive social and economic costs, e.g. the practical limits of increased energy pricing and voluntarism.

Inherently, the RD&D conducted by the RD&D Division involves continuous, interagency activity. Much of the work is undertaken by contract, some by the Division, itself, some by other agencies. The Division has a synthesis responsibility to ensure that the government's total program is balanced and uses resources within the public sector and between the public and private sectors most wisely.

The attached budget allocates $16.5 million by sector as follows:

Industrial Sector	$6,000,000
Buildings Sector	6,000,000
Transportation Sector	1,000,000
Systems Studies	3,500,000
Total RD&D	16,500,000

INDUSTRIAL SECTOR F.Y. 1975

Agricultural Projects

1. Overview study to define greates potential for energy conservation in the agricultural area..... $150,000

2. Study of agricultural processes from farm to plant for energy conservation potential..... 350,000

Subtotal, Agricultural..... 500,000

Commercial Practices

1. Energy use and conservation in the service sector..... 250,000

   Overview study of areas where greatest energy conservation potential can occur. Develop areas where further research is required to achieve maximum energy conservation and define policy options.

2. Eliminate use of diesel fuel and gasoline as "cutbacks: in preparation of asphalt for street paving..... 150,000

Subtotal, Commercial..... 400,000

Fuel Substitution

1. Study potential for fuel substitution in industrial processes..... 200,000

Subtotal, Fuel Substitution..... 200,000

Recycling

1. Develop incentives for recycling glass, paper, steel, aluminum, agricultural wastes..... 500,000

Subtotal, Recycling..... 500,000

Industrial Processes

1. Energy use and conservation in the processing and reprocessing of materials..... 150,000

   Overview study of areas where greatest energy conservation potential occurs. Develop areas where further research is required to achieve maximum energy conservation and define policy options.

2. Develop computer controlled program to manage fuel flow to furnaces for optimum operation..... 300,000

   Used in European steel plants. In one such installation it reduced fuel consumption by 25% and increased production by more than 12%.

   Computer controlled monitoring of fuel to adjust for variations in production rate.

   A reliable technical institute estimates 28 trillion Btu/year of projected 1980 industrial gas demand can be saved.

3. Efficiency study of industrial equipment and machinery that are the most energy intensive and are most amendable to upgrading efficiency and would provide the greatest energy conservation potential..... $500,000

4. Cement Manufacture..... 500,000

   One U.S. concern has developed a process whereby the flame is used both to heat and to fluidize the charge.

   Fuel requirements of calcining is reduced by 1/3.

   Lower capital costs than conventional equipment.

5. Develop technology forecast and assessment to examine the energy conservation potential of future advances in process and equipment technology..... 250,000

Subtotal, Industrial.....1,700,000

Heat Recovery

1. Overview study of possibilities for energy conservation in the heat recovery area..... 100,000

2. Heat recovery at furnace stack..... 500,000

   Past studies have shown that flue gas temperatures at the exhaust stack of furnaces are in the 800-900°F range. Until recently there were very few economic incentives for manufacturers to develop more efficient heat transfer systems. Significant energy savings can occur if exhaust temperatures were lowered to the 300-400°F range. This study would look into this area in depth, develop methods for increasing efficiency of furnaces, and recommend means for transferring this information. It would include an assessment of economic incentives necessary to make the technical innovations cost effective.

3. Waste Heat Recovery - Recuperators to Preheat Combustion Air.... 100,000

   Technology is developed and available in the U.S.

   Preheat work with flue gases.

   15 - 30% fuel savings where installed by one U.S. manufacturer.

Subtotal, Heat Recovery..... 700,000

Institutional Changes

1. Develop estimates of elasticity of demand for energy in selected selected industries..... 500,000

2. Study user tax and Federal incentives for industrial energy conservation..... 500,000

3. Analysis of energy and fuel curtailments to industry-develop predictors..... 500,000

4. Investment tax credit applicable to capital expenditures for energy conservation systems and equipment..... $100,000

5. Develop heating, cooling, illumination standards for industry based on well-designed tasks and evaluations..... 400,000

Subtotal, Institutional.....2,000,000

Summary of Industrial Sector

Agricultural Projects.....	500,000
Commercial Practices.....	400,000
Fuel Substitution.....	200,000
Recycling.....	500,000
Industrial Processes.....	1,700,000
Heat Recovery.....	700,000
Institutional Changes.....	2,000,000
GRAND TOTAL.....	6,000,000

BUILDINGS SECTOR, F.Y. 1975

Space Heating and Air Conditioning(include shell)

1. Energy management in large buildings computer control..... 200,000

2. Device design - hot water system, heat pump design, and heat exchangers for building effluents..... 200,000

3. Factors affecting design and engineering of buildings (psychological, physiological, behavior patterns)..... 400,000

4. Develop, adapt, test and evaluate material products and procedures for E.C. in existing buildings..... 500,000

5. Develop, adapt, test and evaluate material products and procedures for E.C. for new buildings..... 500,000

6. Mobil home studies..... 250,000

Subtotal, Space Heating and Air Conditioning.....2,050,000

Lighting Standards, Development and Evaluation

1. Evaluate energy saving potential of altered lighting and requirements and advanced technology such as high efficiency and automatic controls..... 100,000

2. Impact of lighting on heating, cooling and peak loads..... 100,000

3. Economic and employment effects of lighting conservation..... 100,000

Subtotal, Lighting Standards, Development and Evaluation. 300,000

General Residential/Commercial Design and Operational Innovations for Energy Conservation, Including Demonstration

1. Demonstration of retrofit technology into each of six types of commercial buildings	$650,000
2. Development and implementation of retrofit package for use in recently constructed energy inefficient residential subdivision	400,000
3. Peak shaving, rate management studies (incentive techniques)	300,000
4. Demonstration of energy conservation program on citywide level	500,000
5. Monitoring activity	200,000
Subtotal, General Resident/Commercial Design and Operational Innovations for Energy Conservation, Including Demonstration	2,050,000

Institutional Studies

1. Building codes - development and implementation	200,000
2. Institutional study of construction and reality industries	200,000
3. Energy pricing studies - relationship between building energy demand and energy prices and price structure	300,000
4. Energy price studies - life cycle costs	300,000
5. Compliance assurance mechanism (e.g., guide book, spec.)	300,000
Subtotal, Industitional Studies	1,300,000
Basic Research in Building System and Planning - Long-Range Strategy	300,000
Subtotal, Basic Research in Building System and Planning - Long-Range Strategy	300,000

Summary for Buildings Sector

Space Heating and Air Conditioning	2,050,000
Lighting Standards Development and Evaluation	300,000
General Residential/Commercial Design and Operational Innovations for Energy Conservation, Including Demonstrations	2,050,000
Institutional Studies	1,300,000
Basic Research in Building Systems and Planning - Long-Range Strategy	300,000
GRAND TOTAL	6,000,000

TRANSPORTATION SECTOR F.Y. 1975
POLICY RESEARCH PROJECTS

1. Midterm Conservation Options and Impacts Assessment..... $400,000

   After carpools, encouragement to take mass transit, higher load factors on commercial aircraft, what next? This overview study would examine longer term conservation policy candidates in transportation to determine what public policies may be required to:

   - Encourage quantifiable increases in use in relatively less energy-intensive passenger modes of transportation.
   - Encourage freight shipments on relatively less energy-intensive freight modes of transportation.
   - Remove inefficient barriers to free flow freight and passenger movements, e.g. gateways, weight restrictions, return-haul limits.
   - Better understand consumer preferences, elasticities, equities and build policies which take cognizance of this data bank.

2. Demonstrations..... 400,000

   - Highway system (carpooling, dial-a-ride, microbuses, traffic systems, semi-taxis).
   - Specialized electric vehicles for post office.
   - Lindenwald or other radial line assessment of energy consequences of mass transit and changes due to recent energy shortages.

3. Task Order Services Contract (e.g. TSC)..... 200,000

   - Contingency fund for short turn around items, e.g. impacts of Daylight Saving Time on accidents, energy, lifestyles.
   - Energy impacts and resource implications of specific public works projects.
   - Fuel implications of alternative auto policies (also socio-economic secondary implications)

Summary for Transportation Sector

Midterm Conservation Options and Impacts.....	400,000
Demonstrations.....	400,000
Task Order Services Contract.....	200,000
GRAND TOTAL.....	1,000,000

SYSTEMS STUDIES F.Y. 1975

1. Development of economywide scenarios for the kind and degree of conservation which is feasible and defensible across the economy, with particular emphasis on the fairness between sectors and on the problems characteristic of each sector. This development must include details by activity within the sector, by technology across and within subsectors, by season, and by geographic region.

. Regional extensions of Reference Energy System	$275,000
. Governor's Energy Project; Analysis of Effectiveness of Curtailment Measures	250,000
. Development of detailed Industrial Data Base on Plants, Practices, and Prices	350,000
. Energy Abstract Journal	50,000
. Survey of Foreign Practices	75,000
. Energy in Transport-Land Use Tradeoffs	250,000
. Analysis of Regional Residential/Commercial Energy Savings Opportunities	250,000

2. Research toward the development of legislative, administrative, and fiscal tools appropriate for creating incentives that will eliminate energy waste across sectors, e.g. price regulation, tax subsidies or penalties.

. Electric Utility Rate Regulation and Energy Conservation	400,000
. Natural Gas Prices and Energy Conservation	150,000
. Emission Charges/Controls and Energy Conservation	200,000

3. RD&D on energy savings which accrue from sectoral interactions, e.g. one sector's usage of another sector's waste heat or materials, or one sector's changes in demands on another sector.

. Telecommunications (feasibility of substitution for inter-city flights)	200,000
. Small Solid Waste Burning Gas Turbine System for ADVUS - Feasibility Study	650,000
. Coal Burning Sterling Engine System for Advanced IUS-Feasibility Study	400,000

Summary of Systems Studies

Economywide Conservation Scenarios	1,500,000
Policy Tool Development	750,000
Gross-Sectoral Energy Savings	1,250,000
GRAND TOTAL	3,500,000

2. OFFICE OF ENERGY DATA AND ANALYSIS

Office of Energy Data and Analysis: Fiscal year 1974, -0-; fiscal year 1975, $5,000,000; increase, $5,000,000. The increase consists of:

	Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1)	$+2,400,000	+30	$5,000,000	90	Base level transfer.
(2)	+500,000	--	---	---	Supplemental Annualization.
(3)	+400,000	+20	---	--	Discontinuance of Bureau of Mines reimbursements.
(4)	+1,700,000	+40	---	--	Increased staff and contract funds.
	+5,000,000	+90			

Cost Factors Involved in Increases

(1) Base level of program previously included in the Secretary's "Salaries and Expenses" account.

(2) Annualization of fiscal year 1974 supplemental -- staff costs only.

(3) Direct funding of 20 positions previously reimbursable for Bureau of Mines.

(4) Forty additional positions averaging $26,700 plus $630,000 in additional contract funds.

The President in his Energy Message to Congress on April 18, 1973, directed the Secretary of the Interior to develop a capability for gathering and analyzing energy data. In the President's June 29th Message, he directed that the Secretary have the resources to assemble information with respect to energy reserves and demands in all sectors, perform analyses and identify energy policy and program options.

The Office of Energy Data and Analysis was formed to undertake these analytical tasks. The Office is responsible for formulating and recommending policy for energy data development, providing a focal point in the Federal government for energy data analysis. This analysis involves monitoring emerging trends in energy utilization and availability; developing models for short-and long-range forecasting of energy conditions; and establishing the interrelationships between energy, other factors of production, and national economic growths. The results of such analytical work are also used in support of energy policy studies.

The basic mission of the Office -- to develop better data systems and improve analytical capabilities and forecasting techniques -- remains unchanged. However, with the formation of the Federal Energy Office and the explicit Presidential directive to be responsive to the leaders of the Federal program, requirements have increased. Further, the critical energy situation with the current imbalance between supply and demand requires more sophisticated, timely forecasting and monitoring systems. To develop and implement these systems requires increased contract efforts for systems design, increased funding for ADP services to operate the systems, and increased staff to develop and operate the monitoring systems.

Activities During Fiscal Year 1974

The Office of Energy Data and Analysis has begun publishing the Monthly Energy Indicators, the weekly Petroleum Situation Report and has established systems for measuring consumption of home heating oil and petroleum imports. Similar systems are being developed to evaluate and monitor the gasoline, residual fuel oil, and natural gas situations. In addition to these short-term capabilities, program work has been initiated to greatly increase our ability to deal with more complex long-range problems and predict the effects of the policy actions we have already taken or are now contemplating. Contract funds are being used to develop more sophisticated computer data systems, develop new short-term and long-range forecasting models, and to undertake critical policy studies on coal use, Federal leasing policy, environmental/energy interactions and industry structural changes.

The Office has attracted a small highly trained professional staff, competent to initiate and coordinate the difficult technical task of analyzing all aspects of the energy situation. The staff includes specialists with background and experience necessary to assess the impact of variations in supplies in nuclear, fossil fuels, and other types of generation, as well as transmission, distribution, utilization, systems and environmental factors. The core group of the Office is economists, operations research analysts, mathematicians and statisticians. The Office has been organized into four functional areas as follows:

- Basic Energy Data Policy and Analysis
- Energy System Modeling
- Energy Information Systems
- Energy Policy Studies

The first three divisions are concerned with the integration, storage and evaluation of energy data, and the development and implementation of analytical techniques and models. The policy studies group will be responsible for providing analysis of policy questions posed by the Department of the Interior, the Federal Energy Office, the Office of Management and Budget, and other elements of the Federal energy establishment.

During fiscal year 1974, $400,000 and 20 positions were redirected from the Bureau of Mines and made available to the Office of Energy Data and Analysis. In addition the Office was granted a supplemental increase of $2,400,000 and 30 positions.

BASIC ENERGY DATA POLICY AND ANALYSIS DIVISION

A. Purpose and Functions

Purpose - The Division of Basic Energy Data Policy and Analysis is to formulate and direct the implementation of policies to improve the comprehensiveness and timeliness of data and information required to support:

- Energy research and modeling,
- More detailed and explicit treatment of energy sectors in the National Income and Product Accounts, and
- Efficient monitoring and surveillance of developing trends and situations in the energy and energy-related sectors.

Functions -

1. Identify and catalog energy data sources.

2. Develop, implement and maintain a system of regional, national and international energy accounts.

3. Evaluate the energy data and data collection procedures identified to determine their suitability for use in implementing systems of energy accounts.

4. Make policy recommendations for the improvement of existing data collection procedures, seeking to remedy any deficiencies in these programs and propose new programs as needed to fill gaps in existing data collection activities.

5. Prepare and publish the Monthly Energy Indicators.

6. Maintain a library of the most important data source publications.

7. Assist other elements of the Office of Energy Data and Analysis in acquiring and assembling the data needed in their work.

B. Fiscal Year 1974 Accomplishments

Major accomplishments in progress or completed:

1. Developed and initiated publication of the Monthly Energy Indicator.

2. Developed and initiated publication of the weekly Petroleum Situation Report.

3. Established a system for monitoring the consumption of home heating oil, and for measuring the impact of the President's heating oil conservation measures.

4. Established systems for rapid reporting of petroleum imports.

5. Initiated a cooperative effort with the Federal Power Commission to establish a system for rapid reporting of electricity and natural gas consumption.

6. Advised and provided assistance to the Bureau of the Census in designing and implementing its Annual Survey of Oil and Gas.

7. Prepared an issue paper on mandatory reporting of energy information.

8. Initiated an effort to identify systematic energy data collection activities of all Federal agencies.

9. Participated with Federal Energy Office staff for Operations and Compliance in the development and implementation of information systems needed to administer the petroleum allocation regulations.

10. Initiated development of a conceptual framework for natural energy accounts.

11. Participated as a member of various NSF panels relating to the development of energy data, including service on a steering committee for an NSF grant to the MITRE Corporation to develop a logical framework for energy measurement and accounting.

C. Summary of Programs with Associated Contract Funds for F.Y. 1975

The major activities of the Data Division will involve pursuing programs begun in fiscal year 1974 and the initiation of further programs to accomplish the functions delegated to the Division. The proposed program of activities is as follows:

1. Identify and catalog energy data sources. ($50,000)

2. Evaluate energy data collection procedures to determine the statistical reliability, accuracy, completeness, and relevance of the existing data and data collection programs. Special attention will be given to the frequency of the reporting of the various items of information, and to the timeliness with which the data are compiled. ($100,000)

3. Formulate and recommend improved data collection policies including standards for the collection and dissemination of energy data.

4. Prepare and publish Monthly Energy Indicators to present current information about selected important topics and problems in the area. It includes both current data and forecasts, all organized to provide analysts and policy makers with a concise review of the developments and trends in the most significant areas of the energy field. The Monthly Energy Indicators supplements existing data reporting periodicals, by providing analysis of a relatively small number of the most important topics. It is not a substitute for these publications, as it treats these topics in irregular rotation, as current developments or policy needs dictate. It does not provide a regular monthly update for any large number of statistical series.

5. Participate with other elements of the Office of Energy Data and Analysis in assembling special data bases.

6. Maintain Office of Energy Data and Analysis energy data library.

7. Develop, implement, and maintain a system of regional, national, and international energy accounts to provide a single comprehensive framework for assembling a consistent set of data for modeling energy usage and for energy policy analysis. The energy accounts will be implemented by drawing together data assembled in all of the other work of the Office of Energy Data and Analysis and other relevant agencies. Special studies may also be required to derive the needed accounting data, in an appropriate form, from data sources and data collection programs presently in existence or proposed by the Division. ($400,000)

ENERGY SYSTEM MODELING DIVISION

A. Purpose and Functions

Purpose - The Division of Energy System Modeling is to respond to the requirements of current policy analysis by applying quantitative methods to the formulation, implementation, and solution of models of energy sub-systems. The focus of this Office in on adopting energy models and systems to the requirements of particular forecasting and policy simulation studies, applying heuristic techniques in developing responsive models for pressing problems, and in extending and enhancing the Office of Energy Data and Analysis' capabilities to deal with computationally intractable problems.

Functions -

1. Design and participate in the implementation of a family of large scale system solution algorithms.

2. Perform mathematical and statistical analysis of models.

3. Participate in the development of major energy systems simulations.

4. Structure and model components of the Energy System in response to current policy requirements.

5. Survey and collect energy models from the available literature.

6. Assimulate and adapt existing models for application to Federal energy policy questions.

7. Integrate models, data, expert judgments, policy decisions, and system constraints to forecast and analyze future probable states of components of the Energy System.

8. Identify areas of priority research in the spectrum of Energy System models.

9. Participate in policy analysis studies with other agencies and elements of the Federal Energy Office.

B. Fiscal Year 1974 Accomplishments

Major accomplishments completed or in progress include the development of:

1. A National Petroleum Short-Term Supply and Demand Model to describe the petroleum production, refining, storage and consumption process.

2. A National Short-Term Supply and Demand Model to describe the extraction, conversion, storage and consumption of coal products.

3. A National Natural Gas Short-Term Supply and Demand Model to describe the production, refining, storage and consumption of natural gas.

4. A Regional Petroleum Short-Term Supply and Demand Model so that major distribution problems can be identified.

C. Summary of Programs with Associated Contract Funds for F. Y. 1975

The major activities of the Energy System Modeling Division will involve continuing development of models to display and analyze future probable states of components of the energy system. The proposed program of activities is as follows:

1. Use and application of available statistical software required to perform modeling estimation and evaluation ($30,000).

2. Application of the set of short-term supply and demand models developed in fiscal year 1974 to policy analysis and forecasting efforts ($95,000).

National Petroleum Model

National Coal Model

National Natural Gas Model

Regional Petroleum Model

3. Completion of development, refinement and application of two additional regional short-term supply and demand models ($100,000).

Regional Coal Model

Regional Natural Gas Model

4. Completion of development of an International Petroleum Short-Term Supply and Demand Model requiring extensive data definition, collection and construction ($50,000).

5. Initiate development of an International Petroleum Mid-Term Supply and Demand Model to complement the short-term model by describing changes in production capacity, reserve discovery and development and distribution capacity ($100,000).

6. Updating and application of a series of Refinery Process Model essential to the updating and maintaining of the petroleum models ($50,000).

7. Continued acquisition, modification and application of a set of Mid-Term Fuel Substitution Behavioral Process Models which deal with the problem of identifying and describing fuel substitution possibilities for exogenously determined levels of energy demand ($150,000).

ENERGY INFORMATION SYSTEMS DIVISION

A. Purpose and Functions

Purpose - The Energy Information Systems Division is to develop, maintain and participate in the application of energy information systems in support of Office of Energy Data and Analysis energy forecasting and policy analysis programs.

Functions -

1. Participate in selecting, evaluating, and documenting for users behavioral and process models of the energy system to be assimilated into an integrated computer system of the models, their associated data bases, and the computer programs required to manipulate and solve the models. Complete assimilations for selected models and maintain the model library for use in Office of Energy Data and Analysis policy research and analysis studies.

2. Develop and maintain a computer programming framework for maintaining and applying the models included in the library, including conferencing and DELPHI subsystems to facilitate application of judgmental data in policy simulation and forcasting studies.

3. Provide programming services as required in support of designing and implementing statistical and mathematical algorithms to be used in support of modeling and policy studies.

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4. Participate in simulation studies of the total energy system in support of energy policy analyses.

5. Participate as information scientists in applying the energy information systems in support of energy forecasting and policy simulation studies.

6. Develop and maintain access to selected computer systems for other elements of the Office of Energy Data and Analysis.

B. Fiscal Year 1974 Accomplishments

1. Evaluated computer systems support requirements for Office of Energy Data and Analysis components.

2. Established access to selected computer systems to support model building and statistical analysis functions.

3. Provided programming and mathematical support for modeling formulation and solution.

4. Evaluated and acquired available statistical software required for model estimation and evaluation.

5. Completed long-term forecast of energy conditions, including an analysis of strategies for attaining energy self-sufficiency.

6. Completed study of inter-factor and interfuel substitution possibilities in U.S. manufacturing.

C. Summary of Programs with Associated Contract Funds for F.Y. 1975

The major activities of the Energy Information Systems Division continue in the development of an integrated information system and in pursuit of programs to support other Office of Energy Data and Analysis functions. The proposed program of activities is as follows:

1. Establish and maintain access to selected computer systems ($500,000)

2. Provide programming services.

3. Participate in forecasting and simulation studies.

4. Develop, maintain, and enhance as required, information and programming systems to support research and policy analysis. ($200,000)

5. Participate in design and implementation of statistical and mathematical algorithms. ($50,000).

6. Maintain current library of models and associated data bases. Participate in selecting, evaluating and assimilating behavioral and process models.

ENERGY POLICY STUDIES DIVISION

A. Purpose and Functions

Purpose - The Energy Policy Studies Division is to provide quick response analyses on a wide variety of energy issues including governmental plans, policies and proposals that may have a significant energy or technical impact.

Functions -

1. Evaluate energy plans and policies using the best available analytical techniques and data.

2. Develop alternative plans and policies.

3. Identify major technical and economic barriers to energy self-sufficiency nationally and internationally.

4. Assess extent to which Federal energy policies and their implementation techniques meet national objectives.

5. Perform short-term special studies on the energy impacts of government policies using best available analytical techniques and data.

6. Initiate and participate in governmental and industrial studies and conferences.

7. Conduct economic impact analyses to describe energy within an industry and the impact shortages may have on the industry.

B. Fiscal Year 1974 Accomplishments

1. In line with the objective of handling all short-term special studies, numerous small studies and requests for analysis were carried out in fiscal year 1974.

   (a) Coal Strip Mining Regulation Review.

   (b) Report on Coal Stocks, Production and Consumption Rates.

   (c) Evaluation of the Effect of Emission Control Devices on Petroleum Consumption.

   (d) Review of Mass Transit Excess Capacities at Peak Hours.

   (e) Liaison with OMB on Review of Lead-in-gasoline Regulations.

   (f) Replies to Congressional Queries on Such Topics as Effects of Emission Control on Smelters; Energy Use by Fuel and Sectors in the United States; Provision of Extra Trains, etc.

2. A study was initiated to determine the economic and labor-realted industries of the various policy options currently under consideration to reduce gasoline consumption.

3. The Division initiated analysis required to prepare annual energy situation reports and begin compilation of summary of major energy research activities during the year.

4. Federal Leasing Policy is being examined to provide a systematic and detailed Federal management plan for the leasing of all Federally controlled energy resources within the constraints of changing energy demands and environmental standards.

C. Summary of Programs with Associated Contract Funds for F.Y. 1975

The major activities of the Energy Policy Studies Division will be a continuation of work begun in fiscal year 1974 and the continuing identification and initiation of programs which will implement the general program objectives of the Division. The proposed program of activities is as follows:

1. Provide quick response analysis on a wide range of energy issues and requests from other offices and Federal agencies ($250,000).

2. Prepare annual energy situation report. This report will summarize major developments in energy utilization and availability in fiscal year 1975, major policy decisions and issues, and will present an intermediate and long-range forecast of energy conditions using the macroeconomic energy model. The report will also provide a summary of major energy research activities during the year.

3. Highlight areas of both high potential payoff and high potential cost-effectiveness for energy source and use developments ($75,000).

4. Complete a study of optimal strategy for the leasing of Federally controlled areas for the development of energy resources ($50,000).

5. Use the short-term energy forecast models developed by the Division of Energy Systems Modelling to give quick-response estimates.

6. Use simulation models of critical energy production and utilization technologies developed by Division of Energy Information Systems to examine energy impacts on selected industries ($30,000).

7. Provide technical evaluation and assistance to all areas of Office of Assistant Administrator ($150,000).

PERSONNEL SUMMARY

	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions...	---	---	132
Average paid employment.....	---	---	128
Average GS grade.....	---	---	10.4
Average GS salary.....	---	---	$18,290

ITEMIZATION OF ESTIMATE

Appropriation Title: Energy Conservation and Analysis — Office of the Secretary

	1973 Actual	1974 Estimate	1975 Estimate	Increase (+) or Decrease (-)
Program and Financing:				
Total obligations/Budget Authority (Appropriation..	---	---	$27,900,000	$+27,900,000
Object Classification:				
11 Personel compensation..	---	---	2,733,000	+2,733,000
12 Personnel benefits.....	---	---	237,000	+237,000
21 Travel and transportation of persons.....	---	---	206,000	+206,000
22 Transportation of things.....	---	---	30,000	+30,000
23 Rent, communications and utilities.....	---	---	282,000	+282,000
24 Printing and reproduction.....	---	---	135,000	+135,000
25 Other services.....	---	---	24,143,000	+24,143,000
26 Supplies and materials.	---	---	64,000	+64,000
31 Equipment.....	---	---	70,000	+70,000
Total Obligations..	---	---	27,900,000	+27,900,000

BUREAU OF LAND MANAGEMENT

Miscellaneous Permanent Appropriations

Appropriated, 1974 (estimate)	$105,065,000
Estimate, 1975	120,105,000
Increase	15,040,000

JUSTIFICATION

1. Payments to Oklahoma (royalties)(receipts limitation), $1,000. The joint resolution of Congress approved June 12, 1926, provides for payment to the State of Oklahoma of 37 1/2 percent of oil and gas royalties received from the south half of the Red River, Oklahoma. The payment is in lieu of all State and local taxes upon Kiowa, Comanche, and Apache tribal funds received from such lands under the Act of March 4, 1923 (42 Stat. 1448), and is to be used by the State for the construction and maintenance of public roads, or for the support of public roads, or for the support of public schools, or other institutions of learning (44 Stat. 740). The estimate is an increase of $1,000 over FY 1974.

2. Payments to Coos and Douglas Counties, Oregon, from receipts, Coos Bay Wagon Road grant lands, $525,000. Not to exceed 75 percent of the receipts in any one year from the Coos Bay Wagon Road grant lands in Oregon are for payment annually in lieu of taxes, to Coos and Douglas Counties, as provided in the Act of February 26, 1919 (40 Stat. 1179), and the Act of May 25, 1939 (53 Stat. 753-754). The estimate is the same as FY 1974.

3. Payments to Counties, Oregon and California grant lands, $57,500,000. In accordance with Title II of the Act of August 28, 1938 (50 Stat. 874, 43 U.S.C. 1181f), 75 percent of the moneys deposited in the Oregon and California grant land fund is to be paid to the counties in which the revested lands are situated. However, the "Oregon and California Grant Lands" appropriation of the Bureau of Land Management provides that 25% of the receipts collected from sale of timber and other products on the O&C lands are available for construction, operation, maintenance of access roads, reforestation, and other Federal lands in the Oregon and California land-grant counties of Oregon. The amount appropriated will be a reimbursable charge against the Oregon and California land grant fund and be reimbursed to the general fund of the Treasury from amounts otherwise payable to the counties. The estimate is an increase of $10,309,000 resulting from an increase in the price of timber in Western Oregon.

4. Payments to States (proceeds of sales) (receipt limitation) $359,000. Under various Acts of Congress including 31 U.S.C. 711, States receive for education, roads and improvements, 5% of the proceeds of sale of public lands and of various materials from the public land after deducting all the expenses incident to sale. The estimate is an increase of $30,000 over FY 1974.

5. Payments to States from grazing receipts, etc., public lands outside grazing districts, $690,000. States are paid 50% of moneys received as grazing fees from public lands outside grazing districts, under the provisions of section 10 of the Act of June 28, 1934, as amended (43 U.S.C. 315i, 315m). The estimate is an increase of $114,000 over FY 1974 attributable to grazing fee increases.

6. Payments to States from grazing receipts, etc., public lands within grazing districts, $777,000. Under the provisions of section 10 of the Act of June 28, 1934, (43 U.S.C. 315b, 315i), 12 1/2% of receipts from grazing fees from public lands within grazing districts is paid to States in which the lands are situated. The estimate is an increase of $167,000 over FY 1974.

7. Payments to States from grazing receipts, etc., public lands within grazing districts, miscellaneous, $8,000. The STates are paid such amounts from grazing fees on miscellaneous lands within grazing districts when fees are not susceptable to a standardized and uniform distribution on a percentage basis (43 U.S.C. 315). The estimate is an increase of $4,000 over FY 1974.

8. Payments to States from receipts under Mineral Leasing Act, $58,734,000. Alaska is paid 90% and other States are paid 37 1/2 of receipts from bonuses, royalties, and rentals under the provision of the Mineral Leasing Act (30 U.S.C. 191), and 37 1/2% of receipts from bonuses, royalties, and rentals from leases of potash deposits under the Act of February 7, 1927, (30 U.S.C. 1012). The estimate is an increase of $4,346,000 from FY 1974, primarily attributable to new oil and gas leasing activity.

9. Payments to counties, natural grasslands, $311,000. Counties in which submarginal lands, under the Bankhead-Jones Farm Tenant Act of July 22, 1937 (50 Stat. 525, 7 U.S.C. 1010) transferred to the jurisdiction of the Department by Executive Order 10787, dated November 6, 1958, are located, are paid 25% of net revenues received during each calendar year from the use of such lands; such funds to be used for school or road purposes or both (7 U.S.C. 1012). The estimate is an increase of $69,000 over FY 1974.

10. Expenses, Public Land Administration Act, $1,200,000. Public Law 86-649 of July 14, 1960 (43 U.S.C. 1381-1383) permanently appropriated to the Secretary of the Interior moneys received as a result of forfeitures by timber sale contractors for failure to restore areas damaged by cutting operations and other amounts received in settlement of damage to timber lands and moneys received from road users for road maintenance. The amounts appropriated remain available until expended. Any amounts in excess of the cost of doing the work authorized are transferred to miscellaneous receipts (74 Stat. 507-508). The estimate is the same as FY 1974.

BUREAU OF SPORT FISHERIES AND WILDLIFE

MIGRATORY BIRD CONSERVATION ACCOUNT

Statement Relating Appropriation Estimate to Current Appropriations

1974 Appropriation (estimated receipts for FY 1974)..... $11,000,000
1975 Appropriation (estimated receipts for FY 1975)..... 12,000,000

Acquisition of refuges and other areas:

	Amount Available 1973	Amount Available 1974	Estimate 1975	Increase or Decrease (-)
Advance (current definite)	$ 7,100,000	$ 3,500,000	....	$-3,500,000
Duck stamp receipts (permanent indefinite)	10,734,313	11,000,000	$12,000,000	1,000,000
TOTAL	$17,834,313	$14,500,000	$12,000,000	$-2,500,000

The program funded from the Migratory Bird Conservation Account provides for acquisition of habitat to maintain the National migratory bird resource pursuant to the Migratory Bird Conservation Act (16 U.S.C. 715-715s), and the Migratory Bird Hunting Stamp Act as amended in 1958 (16 U.S.C. 718d). Basic funding is from money available from the sale of migratory bird hunting stamps commonly known as duck stamps. Receipts from the sale of duck stamps and advance appropriations authorized by the wetlands loan act of October 4, 1961 (16 U.S.C. 715k-3-5), are merged in the Migratory Bird Conservation Account. These funds are available exclusively for payment of U. S. Postal Service expenses of printing and selling duck stamps and the costs of location, ascertainment, and acquisition of suitable areas for migratory bird refuges and waterfowl production areas.

The Wetlands Loan Act was passed in 1961 to accelerate the acquisition of waterfowl habitat. An objective of 2,500,000 acres was established for this accelerated program, which has been extended from the initial 7-year program to the present 15-year program. The advance appropriations have totaled $84.9 million against the $105 million authorization. After the loan authorization terminates on June 30, 1976, repayment of the loan begins with 75 percent of annual duck stamp receipts.

No advance appropriation is being requested for fiscal year 1975. The obligation program of $14.8 million will be used to acquire the most critical tracts for refuges and waterfowl production areas. The funds will also be used to purchase long-term options that can be accepted in future years and to lease tracts in order to hold them from being converted to other uses. Even though wetlands continue to be threatened with destruction and prices are escalating at a rapid rate, there is this means of flexibility that permits postponement of obligations for a limited time. Thus, existing staff can be used to stockpile future commitments.

Accomplishments and future programs: In the twelve years of the accelerated program, 1,657,000 acres have been acquired or protected by easement, as shown below. The accomplishments include the establishment of 45 new refuges and completion of 36 refuges. If the estimated acreage through Fiscal Year 1975 is acquired, this will represent 74 percent of the objective. However, even if all of the $105 million loan is appropriated, acquisition will fall short of the program objective by about 500,000 acres.

ESTIMATES OF ACCOMPLISHMENTS AND OBJECTIVES, 1962-1976
(ACRES)

Year	Refuges	Waterfowl Production Areas			Total
		Fee	Easements	Total	
1962-1973	383,207	334,313	939,528	1,273,841	1,657,048
1974 (estimate)	22,000	24,000	50,000	74,000	96,000
1975 (estimate)	17,000	27,000	48,000	75,000	92,000
Total 1962-1975	422,207	385,313	1,037,528	1,422,841	1,845,048
Objectives (1976)	750,000	600,000	1,150,000	1,750,000	2,500,000
Difference	327,793	214,687	112,472	327,159	654,952

FEDERAL AID IN FISH RESTORATION AND MANAGEMENT

Statement Relating Appropriation Estimate to Current Appropriations

1974 estimate (receipts for fiscal year 1973).	$15,539,348
1975 estimate (estimated receipts for fiscal year 1974).	18,800,000

JUSTIFICATION

The Act of August 9, 1950, commonly known as the Dingell-Johnson Act (16 U.S.C. 777a-k) authorizes the Secretary of the Interior to cooperate with the States through their respective fish and game departments in fish restoration and management projects. The Act authorizes appropriation of an amount equal to collections of the 10 percent manufacturer's excise tax on fishing rods, creels, reels, artificial lures, etc. There is authorized to be deducted from amounts so appropriated not to exceed 8 percent for expenses of administration of the Act. The remainder is apportioned to the States on the basis of a formula which takes into account the land area and number of persons holding paid fishing licenses. The Act provides for 1 percent minimum and 5 percent maximum apportionments to the States. The Commonwealth of Puerto Rico will receive 1 percent. Guam, the Virgin Islands and American Samoa will each receive one-third of 1 percent. The States, the Commonwealth of Puerto Rico and the territories of American Samoa, Guam, and the Virgin Islands have two years in which to obligate the apportionments. Any funds not obligated revert to the Bureau and are used for the sport fish research program.

The 1975 program is $2,945,000 above 1974 as follows:

	F.Y. 1974 Estimate	F.Y. 1975 Estimate	Increase or Decrease (-)
1. Payments to States. -- States are reimbursed up to 75 percent of the cost of fish restoration and management projects, including research to aid in management of sport fisheries;			

	F.Y. 1974 Estimate	F.Y. 1975 Estimate	Increase or Decrease (-)
development of access sites and facilities for fishermen; and acquisition and improvement of fish habitat. The Commonwealth of Puerto Rico and the territories of American Samoa, Guam, and the Virgin Islands are reimbursed 100 percent of the cost of such projects. Because of recent increase in receipts, the program is higher in 1975	$13,205,000	$16,000,000	$ 2,795,000
2. Administration. -- Administration of the Act includes apportionment of funds; examination and approval of fish restoration and management plans; processing of project agreement after approval of State plans, inspection of projects; making payments to States and auditing State expenditures; and coordinating research effort of various States. The 1975 program is slightly higher than in 1974.	950,000	$1,100,000	$ 150,000
3. Sport Fish Research. -- Reverted funds are available for the sport fishery research program of the Bureau. The program in 1975 is at the same level as 1974.	210,000	210,000	----
Total Program	$14,365,000	$17,310,000	$ 2,945,000

FEDERAL AID IN WILDLIFE RESTORATION

Statement Relating Appropriation Estimate to Current Appropriations

1974 estimate (receipts for fiscal year 1973).	$49,800,268
1975 estimate (estimated receipts for fiscal year 1974).	$54,185,000

JUSTIFICATION

The Act of September 2, 1937, commonly known as the Pittman-Robertson Act (16 U.S.C. 669-669j) authorizes the Secretary of the Interior to cooperate with the States through their respective fish and game departments in wildlife restoration projects. The Act authorizes the setting aside in a special Federal Aid to Wildlife Restoration fund an appropriation of amounts equal to revenues received from the 11 percent manufacturer's excise tax on sporting firearms, shells and cartridges. An amount not to exceed 8 percent is authorized to be deducted for expenses of administration of the Act. The remainder is apportioned to the States on the basis of a formula which takes equally into account the land area and the number of persons holding paid hunting licenses. The Act provides for one-half of 1 percent minimum and 5 percent maximum apportionments to the States. The

Commonwealth of Puerto Rico will receive one-half of 1 percent. Guam and the Virgin Islands will each receive one-sixth of 1 percent. The States, the Commwealth of Puerto Rico, and the territories of Guam and the Virgin Islands have two years in which to obligate the apportionments. Any funds not obligated revert to the Bureau and are used for carrying out the purposes of the Migratory Bird Conservation Act.

The Federal Aid in Wildlife Restoration Act Amendments of 1970, (P.L. 91-503) authorizes the setting aside of the 10 percent manufacturer's excise tax on pistols and revolvers into the Federal Aid in Wildlife Restoration fund beginning with 1971 tax receipts. One-half of these receipts are apportioned to each State based on population, and may be used to support hunter safety programs including the construction of target ranges.

The 1975 program is $5,400,000 above 1974 as follows:

	F.Y. 1974 Estimate	F.Y. 1975 Estimate	Increase or Decrease (-)
1. Payments to States. -- States are reimbursed up to 75 percent of the cost of approved wildlife restoration projects, including the acquisition and development of land or water areas; wildlife management research; and maintenance of completed projects. The Commonwealth of Puerto Rico and the territories of Guam and the Virgin Islands are reimbursed 100 percent of the cost of such projects. States may also be reimbursed for up to 75 percent of the cost of hunter safety programs including construction of target ranges. The 1975 program is higher than the 1974 program because of increases in excise tax collections.	$42,000,000	$47,000,000	$ 5,000,000
2. Administration. -- Administration of the Act includes apportioning funds; examining and approving States wildlife restoration project plans, specifications and estimates; processing project agreements; inspecting projects; making payments to States and auditing State expenditures; and coordinating research efforts of the various States. The 1975 program is at a slightly higher level in 1974. .	2,700,000	3,100,000	400,000
3. Carrying out Migratory Bird Conservation Act. -- Reverted funds are available to carry out the provisions of the Migratory Bird Conservation Act			

	F.Y. 1974 Estimate	F.Y. 1975 Estimate	Increase or Decrease (-)
and supplement amounts available for wildlife research program of the Bureau. The 1975 program is at the same level as 1974.	300,000	300,000	----
Total Program.	$45,000,000	$50,400,000	$ 5,400,000

NATIONAL WILDLIFE REFUGE FUND

Statement Relating Appropriation Estimate to Current Appropriation

1974 appropriation	$4,500,000
1975 appropriation	4,700,000

JUSTIFICATION

The Refuge Revenue Sharing Act (16 U.S.C. 715s) authorized the expenditure of revenues from the National Wildlife Refuge System. Revenues consist of receipts from the sale or other disposition of animals, timber, hay, grass or other products of the soil, minerals, shells, sand or gravel, from other privileges, or from leases for public accommodations or facilities on refuges. The Act authorizes deduction of necessary expenses incurred in connection with the revenue-producing measures and payment to participating counties of the larger of either 25% of net revenues of each refuge or 0.75% of the value of lands acquired in fee. The remainder of the receipts revenue is available for management of the National Wildlife Refuge System and for Enforcement of the Migratory Bird Treaty Act.

The following table shows the program for F.Y. 1973 through F.Y. 1975:

	1973	1974	1975
Prior year unobligated balance	$4,225,708	$4,122,750	$4,141,750
Total receipts	4,012,474	4,500,000	4,700,000
Less expenses for sales	-500,000	-500,000	-700,000
Net receipts	$3,512,474	$4,000,000	$4,000,000
Total available current year	$7,738,182	$8,122,750	$8,141,750
Less:			
Payment to counties	2,825,957	2,710,261	3,000,000
Program - current year	789,475	1,270,739	900,000
Total costs	$3,615,432	$3,981,000	$3,900,000
Balance forwarded	$4,122,750	$4,141,750	$4,241,750

The program for 1975 is as follows:

Expenses for sales - $700,000. The Act provides for payment of expenses incurred in connection with revenue-producing measures prior to distribution of the revenues. Examples of such expenses are salaries of foresters to cruise and mark timber for sale, auctioneer's fees, transportation of furs to auction houses, and labor and supplies for butchering and shipping buffalo. This fund has not received pay act increases; therefore each time salaries are increased, it results in the value of the expenses for sales program being underestimated by

like amounts. The requested $200,000 increase will help offset pay increases incurred since 1967.

Payments to counties - $3,000,000. The Act provides for participation of counties in net revenues. The distribution is 25% of net revenues or 0.75% of the value of lands acquired in fee in case of each refuge to be expended by the county for the benefit of the public schools and roads. When a refuge consists of reserved public lands and is situated in more than one county, the net receipts are prorated to each county in proportion to the area of the refuge in the particular county. The Act provides every five years for a re-examination of land values in order to reflect the current land cost levels.

Development and maintenance to wildlife refuges - $550,000. The receipts remaining after payments of expenses and distribution to counties are available to supplement funds provided for development and management of wildlife refuges in direct appropriations.

Enforcement activities - $350,000. Net receipts are also available to supplement funds provided in the Resource Management appropriation for enforcement of the Migratory Bird Treaty Act.

PROCEEDS FROM SALES, WATER RESOURCE DEVELOPMENT PROJECTS ACCOUNT

1974 appropriation	$15,000
1975 appropriation	$15,000

These receipts will be used to cover the expenses of forestry technicians administering timber harvest activities and for development and maintenance of wildlife habitat not to exceed the amount of receipts deposited as proceeds from sales. The Eufaula National Wildlife Refuge in Alabama, located on a Corps of Engineers project, is currently engaged in the initial Bureau of Sport Fisheries and Wildlife activity of timber harvesting on a water resources development project. It is anticipated that additional projects eventually will qualify for utilization of this account.

A new special fund receipt account was established for deposit of these receipts in accordance with Treasury Announcement No. 11578, dated September 17, 1971. This is in pursuant to 16 U.S.C. 460d, which states in part ". . . That in any such lease or license to a Federal, State, or local governmental agency which involves lands to be utilized for the development and conservation of fish and wildlife, forests, and other natural resources, the licensee or lessee may be authorized to cut timber and harvest crops as may be necessary to further such beneficial uses and to collect and utilize the proceeds of any sales of timber and crops in the development, conservation, maintenance, and utilization of such lands. . . ."

NATIONAL PARK SERVICE
MISCELLANEOUS PERMANENT APPROPRIATIONS

Analysis by Appropriation

	Available 1974	Estimate 1975	Increase (+) or Decrease (-)
1. Educational Expenses, Children of Employees, Yellowstone National Park	$294,000	$265,000	$-29,000
2. Payment of Tax Losses on Land Acquired for Grand Teton National Park	23,000	25,000	+2,000
3. Operation, Management, Maintenance and Demolition of Federally Acquired Properties, Independence National Historical Park	25,000	--	-25,000
Total	342,000	290,000	-52,000

1. Educational expenses, children of employees, Yellowstone National Park: Fiscal year 1974, $294,000; fiscal year 1975, $265,000; decrease, $29,000. The decrease consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $-29,000	--	$265,000	--	Reduction reflects completion of improvements to facilities in 1974; amount is not needed in Fiscal 1975.

Program of Work: Public Law 80-604 (62 Stat. 338) approved June 4, 1968, authorizes the use of visitor fees collected at Yellowstone National Park, to provide funds necessary for the education of dependent children of park employees. Assistance is provided for maintaining educational standards at levels consistent with the Park County School District of Montana, for incremental teacher compensation, school supplies, educational aids, payment to school districts for supporting transportation and other services, and for the sound maintenance of the school plant and facilities. A decrease of $29,000 is requested due to completion of improvements to facilities in Fiscal 1974.

2. Payment for tax losses, on land acquired for Grand Teton National Park: Fiscal year 1974, $23,000; fiscal year 1975, $25,000; increase, $2,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+2,000	--	$25,000	--	For additional tax compensation to State of Wyoming.

Need for Increase: Pursuant to the act of September 14, 1950 (64 Stat. 851), the Secretary of the Interior is authorized to use visitor fees collected at Grand Teton and Yellowstone National Parks to compensate the State of Wyoming for tax losses on lands acquired for Grand Teton National Park. The amounts paid by the Service vary from year to year, due in part to the change in the tax rate and assessed valuation, the withdrawal of additional lands from the tax rolls for addition to the park, and the gradual reduction (5 percent per year after a 10-year period) in the computed amount due. An additional $2,000 will be required for tax compensation to the State of Wyoming.

It is estimated that $25,000 will be required to compensate the State for 1974 calendar year tax losses.

3. Operation, Management, Maintenance and Demolition of Federally Acquired Properties, Independence National Historical Park: Fiscal year 1974, $25,000; fiscal year 1975, $-0-; decrease, $25,000. The decrease consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $-25,000	--	$-0-	--	No amount required to operate, manage, and maintain Irwin Building as the building will be demolished.

The demolition of the Irwin Building will be completed in Fiscal 1975. Accordingly, no monies from rental income will be available nor required for operation or maintenance of the properties.

GEOLOGICAL SURVEY

Permanent Appropriation

Appropriated, 1973	$1,451
Estimate, 1974	--
Estimate, 1975	--

JUSTIFICATION

Payments from Proceeds, Sale of Water, Mineral Leasing Act of 1920, Sec. 40(d), Geological Survey

When lessees or operators drilling for oil and gas on public lands strike water, water wells may be developed by the Department from proceeds from the sale of water from existing wells (30 U.S.C. 221-229). No obligations are anticipated in 1975.

BUREAU OF INDIAN AFFAIRS
MISCELLANEOUS APPROPRIATIONS

Statement Relating 1973, 1974 and 1975 Programs

1973 appropriation	$11,135,000
1974 appropriation - estimate	7,740,000
1975 appropriation - estimate	8,401,000

JUSTIFICATION

1. Claims and treaty obligations - $161,000.

A. Fulfilling treaties with Senecas of New York - $6,000.

This money is paid in equal share to members of the Seneca Nation as provided by the Act of February 19, 1831 (4 Stat. 442).

B. Fulfilling treaties with Six Nations of New York - $4,500.

The Six Nations comprise the Senecas, Tonawanda Band of Senecas, Tuscarora, Onondago, Oneida and Cayuga Tribes. This money is allocated as follows: $2,700 to the New York Indians for the purchase of dress goods and $1,800 is distributed per capita to the Oneida Indians under the jurisdiction of the Great Lakes Agency, Wisconsin, as provided by the Act of November 11, 1974.

C. Fulfilling treaties with Pawnees, Oklahoma - $30,000.

This money is distributed per capita to the Pawnees as provided by Article 2 as amended of the treaty of September 24, 1857.

D. Payments to Indians of Sioux Reservation - $120,500.

This is an annual charge against the general fund of the Treasury, the amount being indefinite until applications are made and approved. The legal authority for these payments is found in the Act of March 2, 1889, section 17 (25 Stat. 894); Act of June 10, 1896 (29 Stat. 334); and the Act of June 21, 1906 (34 Stat. 326).

2. Acquisition of lands and loans to Indians in Oklahoma, Act of June 26, 1936 - $10,000.

Funds will be derived from mineral deposits underlying certain lands purchased in Oklahoma and will be used for the acquisition of lands and for loans to Individual Indians, associations, or corporate groups of Indians residing in Oklahoma (25 U.S.C. 507).

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3. Operation and maintenance, Indian irrigation systems - $4,830,000.

Funds are obtained from the collection of assessments against water-users on the various projects and are deposited in the Treasury to the credit of the respective projects. Funds are used for such purposes as annual cleaning of canals and laterals to remove silt, moss and weed growth; repair and replacement of water control structures; operation and maintenance of reservoirs, dams and pumping plants, including the purchase of electrical energy; payment to other government agencies and irrigation districts for operation and maintenance of irrigation systems on Indian lands included and benefited; repair of flood damage; etc. The various projects located on Indian reservations are thus maintained in good operation, permitting the facilities constructed by the Government to be utilized by the Indian and non-Indian landowners within the project who depend upon proper operation and maintenance of the projects for irrigation farming and subsistence. The policy in administration of Indian irrigation projects is to base the assessment rates for the various projects on actual costs.

4. Power systems, Indian irrigation projects - $3,400,000.

Funds are obtained from earned revenue deposited in the Treasury to the credit of the respective projects. Funds are used for the operation and maintenance of two hydrogenerating plants; a diesel power generating plant; transmission lines; distribution systems and pumping plants for the use of the project irrigation systems; the purchase of power for resale and for all necessary expenses for operation of power systems. The project power systems serve their primary purpose of furnishing electrical energy to the projects for irrigation and drainage pumping and also furnish energy to mining and milling properties, public utilities and domestic consumers on the project proper, in nearby towns and villages, and in outlying farming areas. The energy supplied by these projects (San Carlos, Colorado River and Flathead Indian Reservations) in many instances is the only source of electrical energy available to the customers. The approximately 115 million kilowatt-hours which are transmitted over all project transmission and distributary systems annually serve approximately 9,600 domestic and commercial customers.

TERRITORIAL AFFAIRS
ADMINISTRATION OF TERRITORIES

Internal Revenue Collections for the Virgin Islands

Appropriated, 1973	$21,133,606 1/
Estimate, 1974	23,200,000
Estimate, 1975	24,900,000
Increase 1975 compared with 1974	1,700,000

JUSTIFICATION

The local revenue collected annually by the Government of the Virgin Islands is matched, to the extent of the collections less refunds and costs of collection by a payment out of the annual revenue taxes collected by the United States on Virgin Islands products transported to the United States (26 U.S.C. 7652(6)(3) less the amount needed to cover the salaries and expenses of the Comptroller of the Virgin Islands (Public Law 90-496 approved August 23, 1968, 82 Stat. 837). Operations of the Comptroller are included in the Administration of Territories account as a reimbursement. Payment of these funds to the Virgin Islands Government are not made until the following fiscal year.

Displayed below is the current year net collections and subsequent year distribution of funds by fiscal year:

	F.Y. 1972	F.Y. 1973	F.Y. 1974	F.Y. 1975
Current year net collections...	$18,975,521	$17,230,211	$23,200,000	$24,900,000
Subsequent year distribution:				
Comptroller's Office.....	---	470,000	645,000	875,000
Virgin Islands Government....	---	18,505,521	16,585,211	22,325,000
Total.....	---	18,975,521	17,230,211	23,200,000

1/ Fiscal year 1974 amount includes a prior year adjustment of $3,903,395 which represented prior year underpayments.

Office of the Comptroller for Guam

Appropriated, 1973.....	$ 469,000
Appropriated, 1974.....	420,000
Estimate, 1975.....	625,000
Increase 1975 compared with 1974....	205,000

Revenues locally collected in Guam derived from Federal income taxes, custom duties, and other services are used to finance the cost of the Government Comptroller in accordance with Public Law 90-497 (approved August 23, 1968). Operations of the Comptroller are included in the Administration of Territories account as a reimbursement.

OFFICE OF THE SECRETARY

LITTER PREVENTION AND CLEANUP

Appropriation, 1973.....	$10,540
Appropriation, 1974 estimate.....	25,000
Appropriation, 1975 estimate.....	25,000

JUSTIFICATION

Public Law 91-419, approved September 25, 1970, permanently appropriated certain monies to the Secretary of the Interior. Royalty fees for the manufacture, reproduction, or use of the Character "Johnny Horizon" will be used for public service anti-litter programs to maintain the beauty andutility of the Nation's public lands (18 U.S.C. 714).

DEPARTMENT OF AGRICULTURE

Forest Service

Purpose Statement

The Forest Service is responsible for promoting the conservation and wise use of the country's forest and related watershed lands, which comprise one-third of the total land area of the United States. To meet its responsibility the Forest Service engaged in three main lines of work, as follows:

1. Management, protection, and development of the National Forests and National Grasslands. The 155 National Forests and 19 National Grasslands are managed under multiple use and for sustained yield. Under these principles natural resources of outdoor recreation, range, timber, watershed, and wildlife are utilized in a planned combination that will best meet the needs of the Nation without impairing the productivity of the land.

   Direct as well as generated employment for rural residents contribute to community development and to environmental protection and improvement. Gross area within unit boundaries encompasses about 226 million acres in 44 States and Puerto Rico, of which some 187 million acres are under Forest Service administration.

   In managing the National Forests, technical forestry is applied to the growing and harvesting of timber crops. Grazing use is managed to obtain proper range conservation along with utilization of the annual growth of forage. Watersheds are managed to regulate stream flow, prevent floods, and provide water for power, irrigation, navigation, and municipalities.

   Management includes the development, maintenance, and protection of sites and facilities for the millions of people who visit the National Forests each year for recreation purposes. Emphasis is given to protecting scenic quality while at the same time assuring availability for forest users. Wildlife habitat is managed to provide a suitable land and water environment for both game and non-game wildlife.

   Under the multiple use principles most areas are used for, or serve, more than one purpose or objective. For example, about 50 percent of the area within the National Forests serves five different purposes:

   (a) Timber production
   (b) Watershed protection
   (c) Forage production
   (d) Wildlife habitat improvement
   (e) Recreation

   An additional 28 percent serves four purposes in varying combinations. Of the remainder, 21 percent of the total serves three purposes with only 1 percent of the total reserved exclusively for a single purpose, mainly campgrounds and special use areas, such as summer homesites, pastures, and corrals.

The varied interests which frequently conflict and which must be reconciled, and the vast areas covered, clearly require careful planning and skillful management of the National Forest properties to most effectively serve the Nation's people.

The protection of the National Forests includes the control of forest fires, the control of tree disease and insect epidemics, and the prevention of trespass.

The major development activities of the National Forests are reforestation; timber stand improvement; revegetation; construction of roads, recreational facilities, range and other necessary improvements; and land acquisition and exchanges. Each of these activities contributes to the local economy and in many areas serves to improve incomes of the rural poor.

The economic importance of the National Forests and National Grasslands is evident when it is considered that:

(a) They produced a cash income in fiscal year 1973 of $470 million. Approximately 65 percent of this amount is credited to the general fund in the Federal Treasury (miscellaneous receipts). The remainder is distributed in accordance with special acts of Congress, including 25 percent to the States or counties in which lands are located, and 10 percent made available for construction and maintenance of the Forest Service system of roads and trails. In addition to these cash receipts, there are the even greater economic values which result from the processing of end products derived from this utilization of National Forest timber, forage, and minerals. Recreation, wildlife and water result in important economic activity in local, State, and national economies. There are also important intangible values of water, recreation, and wildlife such as the esthetic enjoyment of natural beauty.

(b) The area within National Forests boundaries is equivalent to some 10 percent of the area of the continental United States. Over 24 percent of this land is within areas now experiencing economic distress. Proper management, development, and utilization of these lands are important factors in permanent improvement of these local economies. Millions of people who live in and near the National Forests are supported in whole or in part through the economic development arising from the forests and their resources. These resources offer the most favorable basis for developing prosperous and vigorous local economies and communities.

(c) The National Forests supplied 12.4 billion board feet of timber in fiscal year 1973 to the Nation's forest products industries. This is expected to decrease to 12.0 billion board feet in 1974. Dependence of the forest products industries on National Forest timber continues to increase as the result of depletion of good quality timber on private lands. In some areas, the dependence of local industry on National Forest timber is almost 100 percent. Without this supply some small communities could not exist.

(d) About 3.3 million head of domestic livestock (mature animals) are grazed on the National Forests and Grasslands. In many local areas this is a major industry. Without such Federal rangelands the economic activity would be drastically curtailed from currently depressed levels.

(e) These lands provide about 390 million acre feet of high quality water annually. The lands also provide protection to municipal water supplies for nearly all western cities and towns and many in the East, to irrigation water used on about 20 million acres of western lands, and to many streams with water power developments. They provide flood protection to thousands of acres of rich valley lands and help to prevent more rapid siltation of reservoirs and stream channels. A dependable water supply is an important prerequisite for economic and community development.

(f) They provide habitat for a large part of the big game animal population, for birds, for millions of small game animals, furbearers, and for fish. Hunters, fishermen, and appreciative wildlife users (photographers and birdwatchers) constitute an important supplementary source of income for numerous communities, many of which are economically depressed. These lands provide habitat for 58 endangered and threatened fish and wildlife species.

(g) They provide opportunities for healthful outdoor recreation, with a minimum of restrictions. Outdoor recreation is an important source of supplementary income in most areas as well as providing recreational opportunities for local residents. In some relatively depressed communities it becomes even more important.

2. Forestry research. The Forest Service conducts research in the entire field of forestry and the management of forest and related lands. This includes the growth and harvesting of timber, its protection from fire, insects, and diseases, the protection and management of watersheds, and improved methods for development

and management of recreation resources. It conducts studies in forest economics, marketing of forest products, and a survey of the present extent and potential growth and use of the Nation's forest resources. It also conducts research to develop new and improved products from wood, to increase efficiency of utilizing forest products, and to advance the efficiency and mechanization of forestry operations.

The research program has a two-fold objective:

(a) To backstop the National Forest development program by devising more efficient practices for protecting, managing, and utilizing forest resources and that will not have undesirable consequences on environmental quality and productivity.

(b) To develop new and improved practices that will lead to sounder uses of forests in other public and private ownerships, more efficient and profitable utilization and marketing of forest products, and improvement of the environment on these lands.

The Forest Service disseminates and demonstrates the results of research to owners of private forest and rangelands, to public agencies which administer such lands, to forest product industries, and to consumers. Research in the growing, harvesting, processing, and marketing of forest products results in increased competitiveness for forest products. Contribution of the forest resource to the economic and social welfare is made more effective. Research in the management of resources for water, forage, wildlife, and recreation has similar effects as a basis for community development and satisfaction of national demands.

3. Cooperation with State and private forest landowners. The Forest Service cooperates with State agencies and private owners to improve multiple use management of non-Federal forest lands. Technical help is also provided by the Forest Service in cooperation with the State agencies to the processors of forest products. Opportunities exist for greatly increasing the contribution of these lands in enhancing the environment and to the social and economic welfare of the Nation as a whole and more particularly through rural development activities to improve the economic levels, employment opportunities, and general welfare of the people living in these areas. Specific programs are designed to:

(a) Better protect the 631 million acres of State and privately owned forests and critical watersheds against fires, insects, and diseases.

(b) Encourage better forest practices, for resource conservation, betterment, and profit, on the 393 million acres of non-Federal forest land.

(c) Aid in the distribution of planting stock for forest and windbarrier plantings on non-Federal lands.

(d) Assist the harvesters, processors, and marketers of forest products in doing a better job and thereby bring about greater use of forest products and increased income and employment for rural people.

(e) The Forest Service also provides assistance to States for forestation and tree improvement under Section 401 of the Agricultural Act of 1956 (16 USC 568e-568g), through the State forester, including advice, technical assistance, and financial contributions.

(f) Provide assistance to State and local communities in an intensified development planning effort to improve both the economic situation and environmental quality in rural America and to enhance environmental values associated with use of trees in urban and community areas.

Other work related to forestry includes:

4. Insect and disease control. Activities to suppress and control destructive forest insects and diseases to protect timber, recreation, scenic and other environmental values. Protection is provided to Federal lands and, in cooperation with the States, to non-Federal forest lands.

5. Flood prevention and watershed protection. The Forest Service cooperates with the Soil Conservation Service, appropriate State agencies and the local organizations sponsoring small watershed protection projects initiated under the Watershed Protection and Flood Prevention Act of 1954 (16 USC 1001-1007) in planning and installing forestry and related land resource measures on the watersheds. The Forest Service also collaborates with the Soil Conservation Service, other Federal and State agencies in the conduct of comprehensive river basin studies relating to the development of water and related land resources under authority of the Water Resources Planning Act (42 USC 1962) and 16 USC 1006 mentioned above. Such studies can form part of the basis of plans for regional and community economic development.

   On National Forest lands and on non-Federal forest lands within the watersheds authorized for treatment by the Department of Agriculture under the Flood Control Act (33 USC 701), the Forest Service plans and installs watershed improvement measures, in the form of minor physical structures, cultural measures, and intensified fire control, to retard runoff and reduce flood water and sediment damage. Work on non-Federal land is carried on in cooperation with the Soil Conservation Service and the appropriate State and local agencies.

   The Forest Service cooperates with the Soil Conservation Service and other Federal, State, and local agencies or groups in the emergency treatment of watersheds impaired by fire or other similar disasters to prevent the loss of life or serious flood and sediment damages. This work is performed under the authority of Section 216 of the Flood Control Act of 1950 (33 USC 701b-1) with funds allotted to the Forest Service by the Soil Conservation Service. This section of the Act provides that not more than $300,000 of the regular appropriations for Flood Prevention may be expended during any one fiscal year for emergency measures.

   Generally, this work is performed with funds allotted to the Forest Service by the Soil Conservation Service. Forest Service funds are used to finance land treatment and certain other measures on small watershed projects located on National Forest lands.

6. Job Corps Civilian Conservation Centers. The Forest Service operates 20 Job Corps Civilian Conservation Centers on National Forests throughout the United States under agreement with the Department of Labor. The Forest Service provides the staffing, administration and logistical support to physically operate and maintain the Centers and conduct the basic education, plan and supervise the recreation, and fully implement the vocational training of corpsmen. The funds for this program are transferred from Department of Labor. There are 41 to 60 permanent staff assigned to each Center based upon enrollee capacity of 112 to 224. Total capacity of all Centers is 3,848 corpsmen and Centers operate on a 24-hour, seven-day week basis. Both human and natural resources are being upgraded through these Civilian Conservation Centers, as young men improve their education and job skills in preparation for a more productive life.

7. Youth Conservation Corps. The Forest Service and the Department of the Interior share equally in a program authorized by the Act of August 13, 1970, as amended, (80 Stat. 1319). This work-education program provides: Gainful employment of America's youths from a variety of economic, racial and social backgrounds, ages 15 through 18, during the summer months in a healthful outdoor atmosphere; further development and maintenance of the natural resources of the United States; and an opportunity for understanding and appreciation of the Nation's natural environment and heritage. The work projects include recreation facilities maintenance and construction, wildlife habitat improvement, timber stand

improvement, trail maintenance and construction, and visitor information services. The residential program includes both urban and rural youth who reside away from, as well as adjacent to, public lands. The non-residential program includes those youth who reside adjacent to public lands.

8. Timber stand improvement. Funds collected from timber purchasers in connection with timber sales, under authority of the Knutson-Vandenberg Act, make possible some timber stand improvement work on cut-over areas each year looking to the establishment of natural tree growth and protecting it through the critical period of early growth. This work also helps to obtain stocking of trees of desirable species, form and quality. Timber stand improvement in promising young growth not associated with timber sale cuttings is done with funds directly appropriated by Congress.

9. Brush disposal. National Forest timber sale contracts require treatment of debris from cutting operations or deposit of funds to pay for the work. If it is not feasible for the timber purchaser to dispose of the logging slash, which is the case in most sales, it is done by the Forest Service using deposits made by the purchaser. This work is essential because logging slash increases the fire hazard and may contribute to the buildup of insect populations, increase certain disease infestations, and cause damage to stream channels.

10. Land and Water Conservation Fund. This fund, transferred from the appropriation made to the Department of the Interior, finances the acquisition of lands, waters, or interests in lands or waters by the Forest Service as well as certain other Federal agencies. The Act requires that the lands and waters acquired be primarily of value for outdoor recreation. Means are provided for expanding outdoor recreation opportunities and protecting and improving environmental quality including natural beauty.

11. Rural fire defense. The Forest Service, as a part of its regular programs, also directs Federal activities and provides technical guidance and training to States concerned with the prevention and control of fires which might be caused by an enemy attack or a nuclear accident in rural areas of the United States.

IMPLEMENTATION OF NATIONAL ENVIRONMENTAL POLICY ACT

Federal agencies are authorized and directed by the National Environmental Policy Act of 1969 (PL 91-190) to use all practical means and measures, consistent with other essential considerations of national policy, to carry out the purposes of the Act to protect and enhance the quality of the environment. The Forest Service is an environmental agency and most activities, in the broadest sense, are directed towards the protection and enhancement of the environment. The Act supplements and reinforces previous authorities. Section 102(2)(C) of the Act requires environmental statements on proposed major Federal actions significantly affecting the environment. The objective of this section is to build into all decisionmaking processes an appropriate and careful consideration of the environmental aspects of the proposed action. It assists and encourages agencies to implement not only the letter, but the spirit of the Act.

In addition to consideration of environmental factors in the planning and decisionmaking process in a wide array of Forest Service activities NEPA also provides a formalized procedure for informing and taking account of comments from other agencies, individuals, and groups having expertise on the subject area under consideration.

The Forest Service made a study of the cost and manpower requirements of implementing the Act. The study shows that in fiscal year 1972, the Forest Service spent approximately $13 million implementing NEPA. It is estimated that $5 million would have been spent on impact surveys and related activities normally taken by the Forest Service that would have been done even without passage of NEPA. In fiscal year 1972, the costs for implementing NEPA were approximately 2 percent of the Forest Service budget. However, continued need for increased quality as well as quantity will cause the costs to at least double in fiscal year 1975, according

to careful projections and estimates. Complexity is increasing, the volume of cases is sharply upward, and the scope and quality of statements must be improved. The entire planning and decisionmaking process of the Forest Service is involved.

Cost Summary from Study

Fiscal Year 1972:	Amount (in millions)	Man-Years
Cost of implementing NEPA	$13	712
Related costs and man-years incurred without NEPA	5	273
Increased cost to implement NEPA	8	439
Fiscal Year 1974:		
Estimated cost to implement NEPA	$28	1,533
Related costs and man-years incurred without NEPA	6	273
Increased cost to implement NEPA	22	1,260

The fiscal year 1974 estimated cost for various categories of work is as follows:

Environmental analysis and reports	$16,240,000
Draft and final environmental statements	3,080,000
Input to other Federal agencies, review and comment on other agency statements, and assistance to State and local people	2,800,000
Training, monitoring, inspecting, reporting, and other related activities	5,880,000
Total	28,000,000

Fiscal year 1975 was not included in the study. However, it is estimated that the costs will be at least that estimated for fiscal year 1974 and the percentage in each category will be approximately the same.

To accomplish the purposes of the Act and to meet Agency responsibilities and objectives, Forest Service policy is that the responsible official will not make a decision on a proposed action until the environmental impacts are assessed in detail. Alternative actions that will reduce adverse impacts or enhance environmental quality will be thoroughly explored. In the implementation of this policy, an environmental analysis will be made for proposed uses, activities, and plans concerning or involving National Forest System lands. The Forest Service is also following the same procedures for other activities where there are potentially major and significant environmental impacts or public controversy.

These analyses address the points required in NEPA. Along with established criteria, guidelines, and knowledge of potential or existing controversy, the analysis helps the responsible official determine if the proposal is a major Federal action affecting the environment significantly enough to require an environmental statement.

NEPA principles and requirements are being built into the land use planning and other planning processes. In addition, careful monitoring and evaluation is essential to fulfill the requirements of the task.

Prior to NEPA, the Forest Service prepared "impact" reports on proposed actions; these examined environmental impacts and mitigating measures of proposals. However, NEPA requires agencies to examine a wider range of alternatives, explores cumulative and secondary effects to a greater extent, and further formalize reviews with other agencies and the public.

ORGANIZATIONAL STRUCTURE

The Forest Service maintains its central office in Washington with program activities decentralized to 9 regional offices, 125 forest supervisors' offices, 687 district rangers' offices, 2 State and private forestry area offices, 8 forest and range experiment stations, the Institute of Tropical Forestry, and the Forest Products Laboratory. Location of headquarters offices:

Regional Offices:
- Missoula, Montana
- Denver, Colorado
- Albuquerque, New Mexico
- Ogden, Utah
- San Francisco, California
- Portland, Oregon
- Atlanta, Georgia
- Milwaukee, Wisconsin
- Juneau, Alaska

State and private forestry area offices:
- Upper Darby, Pennsylvania
- Atlanta, Georgia

Experiment stations:
- Ogden, Utah
- St. Paul, Minnesota
- Upper Darby, Pennsylvania
- Portland, Oregon
- Berkeley, California
- Fort Collins, Colorado
- Asheville, North Carolina
- New Orleans, Louisiana

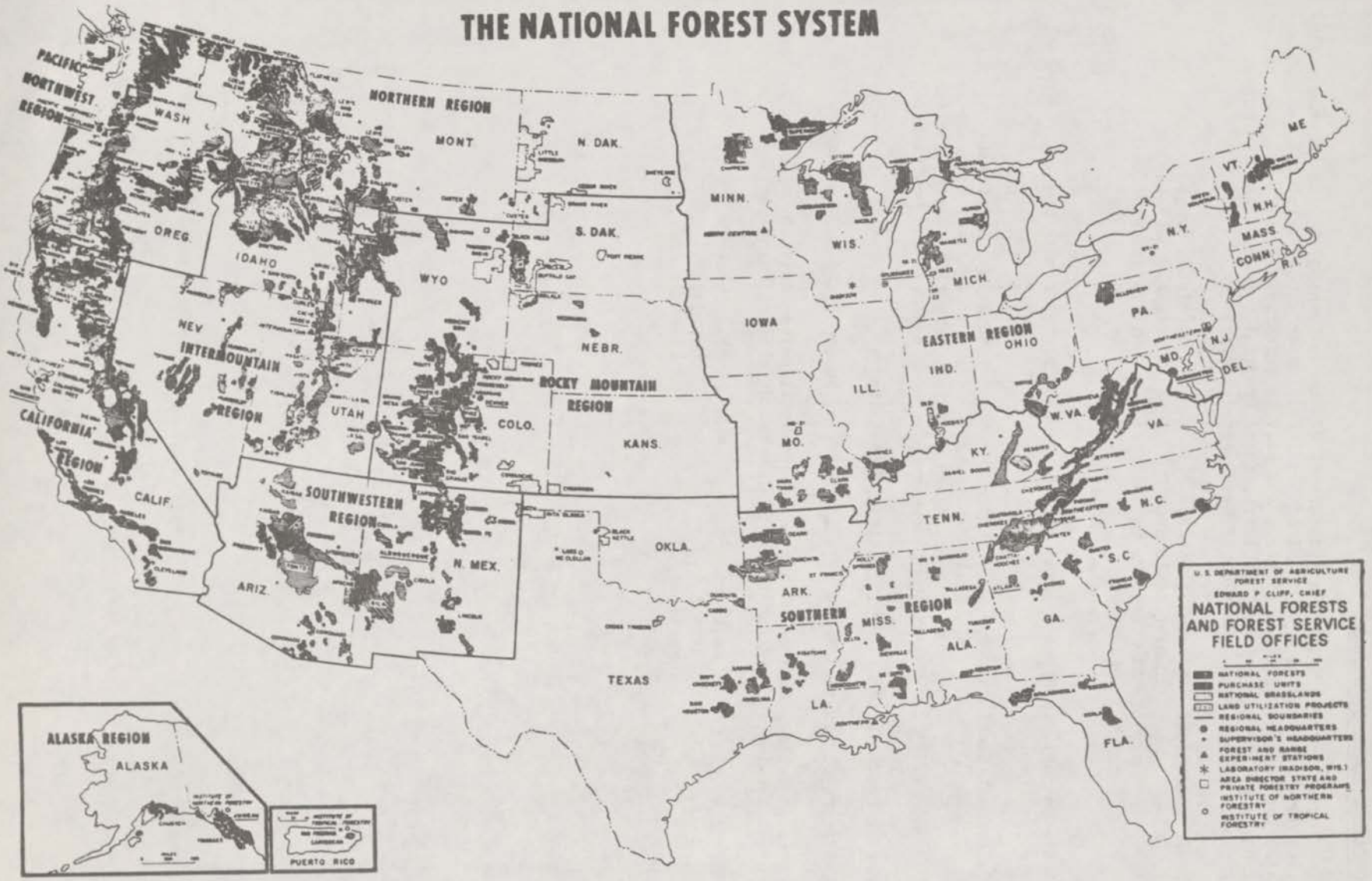
Forest Products Laboratory: Madison, Wisconsin

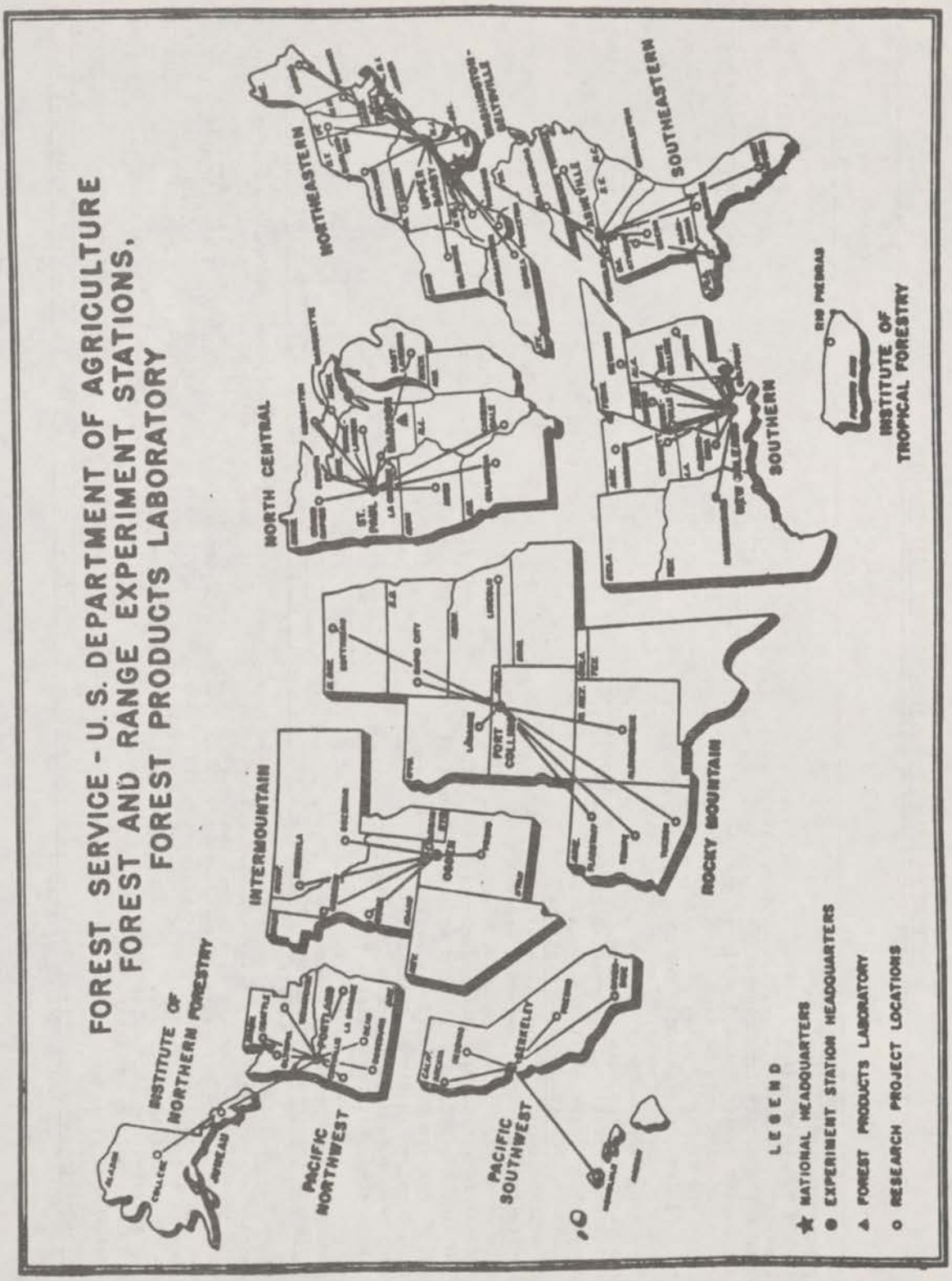
Institute of Tropical Forestry: Rio Piedras, Puerto Rico

National Forest, National Grasslands, and Utilization lands administered by the Forest Service are located in all States except the following six:

- Delaware
- Hawaii
- Maryland
- Massachusetts
- New Jersey
- Rhode Island

THE NATIONAL FOREST SYSTEM




FOREST SERVICE - U. S. DEPARTMENT OF AGRICULTURE
FOREST AND RANGE EXPERIMENT STATIONS,
FOREST PRODUCTS LABORATORY
INSTITUTE OF NORTHERN FORESTRY
PACIFIC NORTHWEST
INTERMOUNTAIN
NORTH CENTRAL
NORTHEASTERN
SOUTHEASTERN
PACIFIC SOUTHWEST
ROCKY MOUNTAIN
SOUTHERN
RIO PIEDRAS
INSTITUTE OF TROPICAL FORESTRY
LEGEND
★ NATIONAL HEADQUARTERS
● EXPERIMENT STATION HEADQUARTERS
▲ FOREST PRODUCTS LABORATORY
○ RESEARCH PROJECT LOCATIONS

Summary of Estimated Appropriations and Receipts

Item	Available 1973 1/	Estimated available 1974 2/	Budget estimates 1975	Increase or decrease 1975 over 1974
Appropriated Funds				
Forest protection and utilization:				
Forest land management 3/	$311,584,778	$280,100,000	$291,136,000	$11,036,000
Forest research	58,963,955	63,816,000	64,485,000	669,000
State and private forestry cooperation	27,837,000	28,181,000	29,746,000	1,565,000
Total, Forest protection and utilization	398,385,733	372,097,000	385,367,000	13,270,000
Construction and land acquisition 3/	48,794,900	26,443,000	24,147,000	-2,296,000
Forest roads and trails 3/	158,840,000	98,200,000	121,000,000	22,800,000
Acquisition of lands for National Forests, Special Acts	80,000	94,000	161,000	67,000
Acquisition of lands to complete land exchanges	- -	55,300	39,310	-15,990
Cooperative range improvements	700,000	700,000	700,000	- -
Assistance to States for tree planting 3/	1,020,000	1,013,000	1,346,000	333,000
Construction and operation of recreation facilities 3/	- -	3,277,837	1,260,000	-2,017,837
Youth conservation corps 3/	3,500,000	10,000,000	10,240,000	240,000
Permanent Appropriations				
Expenses, brush disposal 3/	23,310,037	23,000,000	22,440,000	-560,000
Roads and trails for States, National Forests Fund	33,871,106	45,468,547	40,500,000	-4,968,547
Forest fire prevention 3/	228,373	250,000	250,000	- -
Restoration of forest lands and improvements 3/	27,483	50,000	50,000	- -
Payment to Minnesota (Cook, Lake, and St. Louis Counties) from the National Forests Fund	259,038	259,038	259,038	- -
Payments to Counties, National Grasslands	508,864	549,000	549,000	- -
Payments to school funds, Arizona and New Mexico	114,043	124,307	115,000	-9,307
Payments to States, National Forests Fund	84,676,129	113,668,668	101,200,000	-12,468,668
Total	754,315,706	695,249,697	709,623,348	14,373,651
Deduct permanent appropriations shown above	142,995,073	183,369,560	165,363,038	-18,006,522
Total (excluding permanent appropriations)	611,320,633	511,880,137	544,260,310	32,380,173
Receipts				
Timber sales	$434,410,996	$387,000,000	$425,000,000	$38,000,000
Grazing	5,376,834	6,050,000	6,400,000	350,000
Power	238,776	240,000	250,000	10,000
Recreation	4,625,803	5,000,000	5,600,000	600,000
Land uses	1,055,993	1,200,000	1,400,000	200,000
Mineral leases and permits	5,452,375	5,600,000	5,800,000	200,000
Admission and user fees	4,056,028	- -	- -	- -
National grasslands and land utilization	2,174,668	2,230,000	2,335,000	105,000
Oregon and California grant lands: 4/				
Timber sales	12,320,058	10,000,000	12,000,000	2,000,000
Other	36,004	- -	- -	- -
Total receipts	469,747,535	417,320,000	458,785,000	41,465,000

(Footnotes on next page)

1/ Includes Second Supplemental Appropriation Act, 1973 (PL 93-50, 7/1/73)--increased pay costs, $5,357,000; fighting forest fires, $39,563,000; $4.6 million of trust funds used for fighting forest fires repaid in fiscal year 1974.

Includes travel and program reductions in Forest land management of $6,658,000 applied to fighting forest fires and insect and disease control; $3,179,000 in Forest research and $5 million in State and private forestry applied to fighting forest fires

Excludes GSA space transfers of $428,267.

2/ Excludes following: GSA space transfers of $574,000 (Forest land management, $559,000 and Forest research, $15,000) and proposed supplemental for fighting forest fires, $90,800,000.

3/ In addition, prior year balances are available, including Cooperative law enforcement in the Forest land management activity.

4/ Account established for Oregon and California railroad grant lands, for which receipts are transferred to Department of the Interior for distribution under the Acts of August 28, 1937, June 24, 1954, and August 3, 1961 (43 USC 1181f-g).

JOB CORPS CIVILIAN CONSERVATION CENTERS

(Funds transferred to Forest Service by Department of Labor)

	Available 1973		Estimate 1974		Estimate 1975	
	No. of Permanent Positions	Amount (in thousands)	No. of Permanent Positions	Amount (in thousands)	No. of Permanent Positions	Amount (in thousands)
Center capital	4	864	1	932	1	1,500
Center operations .	815	24,965	805	24,611	805	26,600
Program direction .	78	1,863	78	1,883	78	1/ 2,240
Total	897	27,692	884	27,426	884	30,340

NOTE: Fiscal years 1974 and 1975 estimates are based on best information available to the Forest Service as of January 14, 1974.

1/ Includes administration of union contracts.

FOREST PROTECTION AND UTILIZATION

	Forest Land Management a/	Forest Research	State and Private Forestry Cooperation	Total
Appropriation Act, 1974	$267,351,000	$60,400,000	$27,760,000	$355,511,000
Budget estimate, 1975	291,136,000	64,485,000	29,746,000	385,367,000
Change in appropriation	+23,785,000	+4,085,000	+1,986,000	+29,856,000
Adjustments to 1974 appropriation:				
Appropriation Act, 1974	267,351,000	60,400,000	27,760,000	355,511,000
Proposed supplemental for pay costs	13,467,000	3,431,000	262,000	17,160,000
Transfer to General Services Administration for space rental	-559,000	-15,000	- -	-574,000
Adjustment--Wild and scenic rivers studies on State and private lands	-159,000	- -	159,000	- -
Adjusted base for 1975	280,100,000	63,816,000	28,181,000	372,097,000
Estimate, 1975	291,136,000	64,485,000	29,746,000	385,367,000
Change	+11,036,000	+669,000	+1,565,000	+13,270,000

a/ In addition, $700,000 is available by transfer from Cooperative Range Improvements.

SUMMARY OF INCREASES AND DECREASES
(On basis of adjusted appropriation)

	1974 Estimate	1975 Estimate	Increase or Decrease: Pay Costs	Space Rental	Program
Forest land management:					
Sales administration and management--Increase is for more thorough preparation of timber sales and for the higher costs of sales with more sophisticated logging systems ($2,160,000) and to control log export and substitutions from National Forest lands ($210,000). These increases are offset by a decrease of $396,000 for non-recurrent timber salvage work in tussock moth infested areas to be accomplished in 1974.	$79,463,000	$84,295,000	$675,000	$2,183,000	$1,974,000
Recreation use--Increase is for landscape and design effort in support of timber sale activities.	44,670,000	46,522,000	382,000	1,390,000	80,000

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SUMMARY OF INCREASES AND DECREASES--continued
(On basis of adjusted appropriation)

	1974 Estimate	1975 Estimate	Increase or Decrease		
			Pay Costs	Space Rental	Program
Forest land management--continued					
Wildlife and fish habitat management--Increase of $230,000 is for coordination of wildlife biological needs and requirements with timber sale activities. This increase is offset by a $21,000 decrease which reflects non-recurrent rehabilitation work in tussock moth infested areas to be accomplished in 1974.	$8,694,000	$9,230,000	$66,000	$261,000	$209,000
General land management activities--Increase is for marking land lines and monuments in support of the timber sale program ($100,000); to reimburse the Employees' Compensation Fund ($560,000); and for cost of special Bicentennial and Forestry Centennial edition of booklet, "Highlights in the History of Forest Conservation" ($20,000).	24,741,000	26,460,000	185,000	854,000	680,000
Reforestation and stand improvement--Decrease reflects non-recurrent rehabilitation work in tussock moth infested areas to be accomplished in 1974.	33,331,000	35,317,000	427,000	1,601,000	-42,000
Rangeland management--Decrease reflects non-recurrent rehabilitation work of tussock moth infested areas to be accomplished in 1974.	15,113,000	15,774,000	133,000	532,000	-4,000
Soil and water management--Net decrease consists of an increase for protection of critical soils and unstable slopes and enhancement of water production in support of the timber sale program ($270,000); decrease of $790,000 due to reduction of watershed development activities of other agencies on Forest Service land; decrease of $13,000 reflects non-recurrent rehabilitation work in tussock moth infested areas to be accomplished in 1974; and decrease of $1,000 due to change in amounts for wild and scenic river studies on State and private lands transferred from this activity to general forestry assistance (1974, $159,000; 1975, $160,000).	15,217,000	15,215,000	94,000	438,000	-534,000

SUMMARY OF INCREASES AND DECREASES--continued
(On basis of adjusted appropriation)

	1974 Estimate	1975 Estimate	Increase or Decrease		
			Pay Costs	Space Rental	Program
Forest land management--continued					
Forest fire protection--Net decrease consists of an increase for fire protection in support of the timber sale program ($210,000); decrease of $1.4 million appropriated in 1974 for the Modular Airborne Fire-fighting System; and decrease of $824,000 which reflects non-recurrent timber salvage and rehabilitation work in tussock moth infested areas to be accomplished in 1974.	$36,359,000	$36,518,000	$326,000	$1,847,000	-$2,014,000
Forest insect and disease control--Decrease of $250,000 will be absorbed through a shift in program priorities. In order to maintain at least the same program level for gypsy moth control made possible by a $250,000 supplemental appropriation in 1974, it is proposed to reduce methods improvements efforts.	11,219,000	11,276,000	62,000	245,000	-250,000
Cooperative law enforcement--Decrease in budget authority is due to projected carryover of fiscal year 1974 funds that will be available for obligation in 1975. The request will provide an actual program level increase of $290,000	2,582,000	1,624,000	8,000	41,000	-1,007,000
Minerals management	4,436,000	4,630,000	29,000	165,000	- -
Fighting forest fires	4,275,000	4,275,000	- -	- -	- -
Subtotal, Forest land management	280,100,000	291,136,000	2,387,000	9,557,000	-908,000
Forest research:					
Forest watershed management research--Decrease is based on the discontinuation of research for which funding was increased in fiscal year 1974.	7,710,000	7,716,000	79,000	177,000	-250,000
Wildlife, range, and fish habitat research--Decrease is based on the discontinuation of research for which funding was increased in fiscal year 1974	4,482,000	3,860,000	37,000	116,000	-775,000

SUMMARY OF INCREASES AND DECREASES--continued
(On basis of adjusted appropriation)

	1974 Estimate	1975 Estimate	Increase or Decrease		
			Pay Costs	Space Rental	Program
Forest research--continued					
Forest recreation research--Decrease is based on the discontinuation of research for which funding was increased in fiscal year 1974.	$1,326,000	$1,222,000	$12,000	$34,000	-$150,000
Forest insects and disease research--Decrease reflects completion of non-recurring tussock moth research in 1974 in the amount of $240,000, plus $120,000 based on the discontinuation of research for which funding was increased in fiscal year 1974.	10,761,000	10,936,000	91,000	444,000	-360,000
Trees and timber management research	13,118,000	13,602,000	127,000	357,000	- -
Fire and atmospheric sciences research	7,847,000	8,067,000	43,000	177,000	- -
Forest products utilization research	9,723,000	9,895,000	79,000	93,000	- -
Forest engineering research	1,547,000	1,593,000	11,000	35,000	- -
Forest resources evaluation	3,649,000	3,820,000	34,000	137,000	- -
Forest economics and marketing research	3,653,000	3,774,000	35,000	86,000	- -
Subtotal, Forest research	63,816,000	64,485,000	548,000	1,656,000	-1,535,000
State and private forestry cooperation:					
Cooperation in forest management and processing--Increase is to be used for accelerating technical assistance to mill operators through systems analysis, which could result in increased volume and grade recovery of lumber by an estimated 15 percent from cooperating sawmills	5,052,000	5,574,000	19,000	43,000	460,000

SUMMARY OF INCREASES AND DECREASES--continued
(On basis of adjusted appropriation)

	1974 Estimate	1975 Estimate	Increase or Decrease: Pay Costs	Space Rental	Program
State and private forestry cooperation--continued					
General forestry assistance--Increase to be used for: technical assistance to loggers, landowners, and pulp companies in reducing logging waste and redirecting products to higher quality use ($750,000); accelerating technical assistance to mill operators through systems analysis ($90,000); and $1,000 for wild and scenic rivers studies on State and private lands (see Soil and water management activity above).	$2,718,000	$3,662,000	$46,000	$57,000	$841,000
Cooperation in forest fire control	20,079,000	20,177,000	13,000	85,000	- -
Cooperation in forest tree planting	332,000	333,000	1,000	- -	- -
Subtotal, State and private forestry cooperation ..	28,181,000	29,746,000	79,000	185,000	1,301,000
Total	372,097,000	385,367,000	3,014,000	11,398,000	-1,142,000

PROJECT STATEMENT

(On obligation basis)

Project	1973	1974 Estimate 4/	1975 Estimate	Increase or decrease: Pay Costs	GSA Space	Program
FOREST LAND MANAGEMENT:						
National Forest protection and management:						
(1) Timber resource management:		1/				
(a) Sales administration and management	$68,883,225	$79,463,000	$84,295,000	$675,000	$2,183,000	$1,974,000
(b) Reforestation and stand improvement	27,394,208	1/33,331,000	35,317,000	427,000	1,601,000	-42,000
(2) Recreation use	42,380,595	44,670,000	46,522,000	382,000	1,390,000	80,000
(3) Wildlife and fish habitat management	7,082,523	8,694,000	9,230,000	66,000	261,000	209,000
(4) Rangeland management	14,979,655	15,813,000	16,474,000	133,000	532,000	-4,000
(5) Soil and water management 2/ 3/	13,534,534	15,217,000	15,215,000	94,000	438,000	-534,000
(6) Minerals management 3/	3,095,425	4,436,000	4,630,000	29,000	165,000	- -
(7) Forest fire protection	36,115,756	36,359,000	36,518,000	326,000	1,847,000	-2,014,000
(8) General land management activities 5/	22,190,586	24,741,000	26,460,000	185,000	854,000	680,000
Subtotal	235,656,507	262,724,000	274,661,000	2,317,000	9,271,000	349,000
Amount advanced from Cooperative Range Improvements	700,000	700,000	700,000	- -	- -	- -
Subtotal, National Forest protection and management	234,956,507	262,024,000	273,961,000	2,317,000	9,271,000	349,000
(9) Fighting forest fires	62,141,570	6/ 4,275,000	4,275,000	- -	- -	- -
(10) Forest insect and disease control 7/	11,677,808	11,219,000	11,276,000	62,000	245,000	-250,000
(11) Cooperative law enforcement	1,935,121	2,582,000	1,624,000	8,000	41,000	-1,007,000
Total, Forest Land Management	310,711,006	280,100,000	291,136,000	2,387,000	9,557,000	-908,000
FOREST RESEARCH:						
Forest and range management research:						
(12) Trees and timber management research	12,296,964	13,118,000	13,602,000	127,000	357,000	- -
(13) Forest watershed management research	6,646,071	7,710,000	7,716,000	79,000	177,000	-250,000
(14) Wildlife, range, and fish habitat research	3,493,468	4,482,000	3,860,000	37,000	116,000	-775,000
(15) Forest recreation research	1,222,730	1,326,000	1,222,000	12,000	34,000	-150,000
Subtotal, Forest and range management research	23,659,233	26,636,000	26,400,000	255,000	684,000	-1,175,000
Forest protection research:						
(16) Fire and atmospheric sciences research	7,047,207	7,847,000	8,067,000	43,000	177,000	- -
(17) Forest insects and disease research	9,535,365	10,761,000	10,936,000	91,000	444,000	-360,000
Subtotal, Forest protection research	16,582,572	18,608,000	19,003,000	134,000	621,000	-360,000

PROJECT STATEMENT--continued

(On obligation basis)

Project	1973	1974 Estimate 4/	1975 Estimate	Increase or decrease: Pay Costs	GSA Space	Program
FOREST RESEARCH--continued						
Forest products and engineering research:						
(18) Forest products utilization research	$8,893,776	$9,723,000	$9,895,000	$79,000	$93,000	- -
(19) Forest engineering research	1,471,346	1,547,000	1,593,000	11,000	35,000	- -
Subtotal, Forest products and engineering research	10,365,122	11,270,000	11,488,000	90,000	128,000	- -
Forest resource economics research:						
(20) Forest resources evaluation	3,544,250	3,649,000	3,820,000	34,000	137,000	- -
(21) Forest economics and marketing research	3,600,452	3,653,000	3,774,000	35,000	86,000	- -
Subtotal, Forest resource economics research	7,144,702	7,302,000	7,594,000	69,000	223,000	- -
Total, Forest Research	57,751,629	63,816,000	64,485,000	548,000	1,656,000	-$1,535,000
STATE AND PRIVATE FORESTRY COOPERATION:						
(22) Cooperation in forest fire control	19,954,845	20,079,000	20,177,000	13,000	85,000	- -
(23) Cooperation in forest tree planting	322,990	332,000	333,000	1,000	- -	- -
(24) Cooperation in forest management and processing	4,887,076	5,052,000	5,574,000	19,000	43,000	460,000
(25) General forestry assistance 2/	2,737,401	2,718,000	3,662,000	46,000	57,000	841,000
Total, State and Private Forestry Cooperation	27,902,312	28,181,000	29,746,000	79,000	185,000	1,301,000
Total obligations or estimate	396,364,947	372,097,000	385,367,000	3,014,000	11,398,000	-1,142,000
Unobligated balance brought forward	-7,297,072	- -				
Unobligated balance carried forward 8/	3,391,484	- -				
Unobligated balance lapsing	5,926,374	- -				
Total available or estimate	398,385,733	372,097,000				
Supplemental appropriation	- -	-17,160,000				
Transfer to General Services Administration for space rental	428,267	574,000				
Transfer from other accounts	-4,600,000	- -				
Appropriation or estimate	394,214,000	355,511,000				

1/ For comparability, $500,000 for log export control is shown under Sales administration and management rather than under Reforestation and stand improvement as appropriated.

2/ For comparability, following amounts for Wild and Scenic River Studies on State and private lands are shown under General forestry assistance rather than under Soil and water management as appropriated: 1973, $200,000; 1974, $159,000; 1975, $160,000.

3/ For comparability, an amount of $1 million for surface, environment and mining (SEAM) is shown under Minerals management rather than as appropriated under Soil and water management in fiscal year 1974.

4/ Includes fiscal year 1974 supplementals as follows:

Increased pay costs	$17,160,000
Additional timber sell	6,940,000
Insect and disease program	490,000
Timber salvage and rehabilitation of tussock moth infested areas	1,300,000
Modular Airborne Firefighting System	1,400,000
Total	27,290,000

5/ Includes allocations to the Department of the Interior, Bureau of Land Management: 1973, $270,000; 1974, $270,000; 1975, $500,000.

6/ Excludes proposed supplemental for fighting forest fires, $90.8 million.

7/ Includes allocation to the Department of the Interior, Bureau of Land Management: 1973, $908,000; 1974, $642,000; 1975, $754,000.

8/ Includes 1973 unobligated balances carried forward--

Forest fire protection	$384,089
Cooperative law enforcement	3,007,395
	3,391,484

Projects (1) - (8)

GEOGRAPHIC BREAKDOWN OF APPROPRIATION

National Forest Protection and Management

	1974 estimate	1975 estimate	Change
		(in thousands)	
Alabama	$2,162	$2,257	$95
Alaska	7,071	7,381	310
Arizona	11,233	11,726	493
Arkansas	6,738	7,034	296
California	46,426	48,865	2,439
Colorado	10,955	11,436	481
District of Columbia	12,135	12,668	533
Florida	2,264	2,363	99
Georgia	2,000	2,088	88
Idaho	22,344	23,325	981
Illinois	963	1,005	42
Indiana	750	783	33
Kansas	24	25	1
Kentucky	1,769	1,847	78
Louisiana	2,374	2,478	104
Maine	59	62	3
Maryland	124	129	5
Michigan	4,945	5,162	217
Minnesota	5,445	5,684	239
Mississippi	3,188	3,328	140
Missouri	3,365	3,513	148
Montana	15,387	16,063	676
Nebraska	324	338	14
Nevada	2,083	2,174	91
New Hampshire	1,350	1,410	60
New Mexico	9,632	10,055	423
New York	94	98	4
North Carolina	3,097	3,233	136
North Dakota	268	280	12
Ohio	584	610	26
Oklahoma	506	528	22
Oregon	33,524	34,996	1,472
Pennsylvania	1,729	1,805	76
Puerto Rico	139	145	6
South Carolina	2,067	2,158	91
South Dakota	2,607	2,721	114
Tennessee	1,937	2,022	85
Texas	2,582	2,695	113
Utah	7,936	8,285	349
Vermont	656	685	29
Virginia	3,081	3,216	135
Washington	15,168	15,835	667
West Virginia	1,985	2,072	87
Wisconsin	3,125	3,262	137
Wyoming	6,529	6,816	287
Total	262,724	274,661	11,937

Project (1a)

TIMBER RESOURCE MANAGEMENT - Sales administration and management

1973	$69,280,000
1974	1/79,463,000
1975	84,295,000
Increase	+4,832,000

1/ For comparability, log export control ($500,000) is shown under Sales administration and management rather than as appropriated under Reforestation and stand improvement.

A net increase of $4,832,000 is proposed as follows:

(1) An increase of $2,160,000 for more thorough preparation of timber sales, silvicultural examination, and for higher costs of making sales and supervising the harvest of timber with sophisticated logging systems.

(2) An increase of $210,000 to monitor log export controls, including administration of anti-substitution provision of contracts awarded between January 1 and June 30, 1974 only.

(3) An increase of $675,000 to provide for the full year costs of the pay increase effective in fiscal year 1974.

(4) An increase of $2,183,000 to provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313.

(5) A decrease of $396,000 which reflects non-recurrent timber salvage work in tussock moth infested areas to be accomplished in fiscal year 1974.

Log export controls, which were extended through calendar year 1973 by the Housing and Urban Development Act of 1970 (PL 91-609, December 31, 1970), apply to all sales awarded prior to January 1, 1974. These controls will require continued enforcement monitoring to the conclusion of those sales, some 4 to 5 years hence. It is estimated that program costs for the enforcement of the Act on National Forest lands will be $560,000 in fiscal year 1975, an increase of $60,000 over fiscal year 1974.

Section 301 of the Department of the Interior and Related Agencies Appropriation Act of 1974 prohibits the use of any appropriation for sales "hereafter made" of unprocessed timber from Federal lands west of the 100th meridian in the contiguous 48 States, which will be exported from the United States or which will be used as a substitute for timber from private lands which is exported by the purchaser. Program costs for the monitoring of the anti-substitution provision during fiscal year 1975 are estimated to be $150,000.

The total program for fiscal year 1975, compared with 1973 and 1974, follows:

	1973	1974	1975	Change
		(in thousands)		
Sale preparation	$33,032	$40,031	$42,670	$2,639
Harvest administration	29,153	30,506	31,617	1,111
Subtotal, preparation and harvest	62,185	70,537	74,287	3,750
Enforcement of Log Export Act and substitutions	570	500	710	210
Timber inventory and stand management control	4,267	5,358	5,550	192
Timber salvage of tussock moth infested areas	- -	396	- -	-396
Silviculture examination	2,258	2,672	3,748	1,076
Total	69,280	79,463	84,295	4,832

It is expected that the demand for National Forest timber will remain at a high level, similar to fiscal year 1974. The high standards needed to prepare this volume of timber for sale will also be the same as those established for the previous fiscal year. The Forest Service continues to be under close scrutiny by the American public to manage the forest resources in an environmentally sound manner.

The principal costs per thousand board feet in timber sale preparation are associated with the effort expended for coordinated resource inputs and detailed examination and inventory of the land and resources to assure full consideration and enhancement of the local environment.

Project (1a)

Protection and enhancement of the environment and response to public concerns are evidenced in timber harvest through increased frequency of inspections and closer administration to achieve quality performance:

(1) That minimizes or eliminates adverse impacts on the environment.

(2) Protects the soil.

(3) Insures more complete utilization and cleanup.

(4) Promotes an improved, healthy forest cover.

To achieve a quality timber resource management program requires the assistance of specialists in soil analysis, landscape layout, wildlife management hydrology, and ecology as well as well-trained, competent silviculturists, sales layout foresters, logging systems engineers, and sales administrators. Workload and cost information, including the specialty mix, manpower and dollar resources, is shown in the following tabulation for fiscal years 1973, 1974, and 1975:

	1973	1974 1/	1975
Sale preparation			
Million board feet (local scale)	10,199	11,800	11,800
Cost per thousand board feet	$3.24	$3.36	$3.62
Total cost (in thousands)	$33,032	$39,635	$42,670
Harvest administration			
Expected harvest level in million board feet (local scale)	12,357	12,060	12,650
Total cost (in thousands)	$29,153	$30,506	$31,617

1/ Excludes supplemental funds of $396,000 received in fiscal year 1974 to prepare for sale an estimated 300 million board feet of timber from areas damaged by tussock moth in the Pacific Northwest.

Harvest of National Forest timber is dependent on:

(1) The national demand for timber products (which may be represented by softwood lumber price indices and the expected level of housing starts).

(2) The amount of National Forest timber sold in recent years.

(3) Producers' expectations of future volumes available (represented by the portion of the programed allowable harvest sold).

Based upon these factors, the Forest Service estimates that the timber harvest in fiscal year 1975 will be 12.65 billion board feet (local scale). The Forest Service plans to sell 11.8 billion board feet of timber (local scale).

The above represents the immediate measurable outputs of the timber resource program. The timber harvest program is administered through timber sale contracts to achieve:

(1) Protection and enhancement of the environment.

(2) Harmonization with indigenous ecosystems and other resource uses.

(3) Utilization to the fullest extent possible of all timber harvested.

(4) A healthy forest cover, improved and structured as specified in the timber management plan and individual stand prescriptions.

Adequate supplies of National Forest timber are important to the Nation's housing program and to the Nation's economic program. The orderly progress of timber harvesting across a forest is determined from inventories conducted for timber management planning. Stand management control designed to organize and monitor efficient forest age-class distribution and to promote optimum timber growth also depends on adequate and timely inventory information.

The Forest Service will continue to implement the shift towards annual updating of all timber management plans to incorporate increases resulting from silvicultural activities and changes resulting from multiple use decisions.

The increasing demands for goods and services from the National Forests have changed the pattern of land management. No longer is it sufficient to prescribe management of each resource independently of the other resources nor is it sufficient to prescribe silvicultural measures over broad areas and forest types. It is now necessary to identify, map, measure, and prescribe treatment for each timber stand, in-place, to supplement the extensive, forest-wide statistical sample inventories and the management plans prepared therefrom. Before managers make decisions concerning the extent and pattern of timber harvest, reforestation, or timber stand improvement measures they must know:

(1) Where potential harvest volumes are located.

(2) The current growth and potential growth.

(3) The relationship to other resources and the forest as a whole.

(4) Potential or current problems such as fragile soils.

(5) Public needs and desires.

Returns to the Treasury from the harvest of National Forest timber are summarized in the following tabulation:

Fiscal Year	Receipts (in millions)
1968	$205.6
1969	306.8
1970	283.9
1971	217.0
1972	330.0
1973	446.7
1974	397.0 (estimated)
1975	437.0 (estimated)

Examples of Recent Accomplishments

The record of timber harvested and sold during the past 5 years is compared with the programed allowable harvest in the following table:

Fiscal Year	Annual Allowable Harvest 1/	Actual Volume Harvested	Percent of Allowable Actually Harvested	Actual Volume Sold	Percent of Allowable Actually Sold
	(Volumes in billion board feet, local scale)				
1969	12.8	11.8	92	18.9 2/	148
1970	12.8	11.5	90	13.4	105
1971	12.9	10.3	80	10.6	82
1972	12.9	11.7	91	10.3	80
1973	12.8	12.4	97	10.2	80

1/ As of the January 1 midpoint of the fiscal year. Programed harvest includes only sawtimber for National Forests west of the Great Plains and in Alaska, and sawtimber and convertible products for National Forests in the eastern half of the United States.

2/ Includes Juneau Unit Pulp Sale in Alaska of 8.75 billion board feet.

Project (1b)

TIMBER RESOURCE MANAGEMENT - Reforestation and Stand Improvement

1973	$32,102,000
1974	1/33,331,000
1975	35,317,000
Increase	+1,986,000

A net increase of $1,986,000 is proposed as follows:

(1) An increase of $427,000 to provide for the full year costs of the pay increase effective in fiscal year 1974.

(2) An increase of $1,601,000 to provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313.

(3) A decrease of $42,000 which reflects non-recurrent rehabilitation work in tussock moth infested areas to be accomplished in fiscal year 1974.

The program for fiscal year 1975, compared with 1973 and 1974, follows:

	1973	1974	1975	Change
		(in thousands)		
Reforestation	$19,630	$19,651	$20,804	$1,153
Timber stand improvement	10,335	11,635	12,344	709
Genetic tree improvement	1,740	1,680	1,782	102
Nursery operation and development	397	365	387	22
Total	32,102	33,331	35,317	1,986

The proposed reforestation and stand improvement program will contribute to the long-range goal of improving the total net growth and sustainable harvest volume on the National Forests. Growth resulting from this program will not only help to offset the decrease in available yield brought about by changes in land use but will also help to raise both the short-term and long-term sustainable harvests from National Forests. The long-range increase in yield (by the year 2000) will exceed 90 million board feet annually.

A comparison of proposed fiscal year 1975 outputs with fiscal years 1974 and 1973 follows:

	1973	1974 (estimate)	1975 (estimate)
Reforestation (acres)	130,972	165,099	152,260
Timber stand improvement (acres)	170,438	219,372	204,460
Genetic tree improvement (acres of seed orchards)	1,512	1,512	1,512
Nursery operation and development (No. of nurseries)	12	12	12

Examples of Recent Accomplishments

Reforestation. With appropriated funds, an area of 115,203 acres of National Forest land was reforested in 1973--102,541 by planting and 12,662 by seeding. In addition, 15,769 acres of plantations were established by preparing the ground to promote regeneration from natural seedfall. Other reforestation accomplishments in 1973 include:

(1) Forest Service seed extractories processed 11,338 pounds of seed.

(2) Production of 106.2 million trees in 12 Forest Service nurseries.

(3) Establishment of 40 acres of new seed production areas and 125 acres of new seed orchards. About 15.5 thousand acres were planted with seedlings grown from the better quality seed produced in seed orchards or seed production areas.

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1/ For comparability, log export control ($500,000) is shown under Sales administration and management rather than as appropriated under Reforestation and stand improvement.

Reforestation with funds collected under the Knutson-Vandenberg Act. The following reforestation was in addition to reforestation done with appropriated funds:

	Acres
Tree planting	159,019
Seeding	21,583
Reforestation by natural seed-fall on prepared sites	33,696
	214,298

An additional 5,551 acres of National Forest land were reforested by other Federal and cooperative programs.

The total area reforested where some treatment such as planting, seeding, or site preparation was applied in 1973 was 350,821 acres.

Timber stand improvement. An area of 170,438 acres was treated by the following cultural measures with appropriated funds in 1973:

	Acres
Thinning	110,579
Release	57,249
Pruning	546
Fertilizing	2,064
	170,438

Timber stand improvement was also done for the same purpose with Knutson-Vandenberg funds on the following acreage in 1973:

	Acres
Thinning	117,487
Release	56,134
Pruning	855
Fertilizing	255
	174,731

In addition, 9,245 acres of timber stand improvement was accomplished with other Federal or cooperative funds.

Project (2)

RECREATION USE

1973	$42,053,000
1974	44,670,000
1975	46,522,000
Increase	+1,852,000

An increase of $1,852,000 is proposed as follows:

(1) For landscape and design effort in support of timber sale activities, $80,000.

(2) To provide for the full year costs of the pay increase effective in fiscal year 1974, $382,000.

(3) To provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313, $1,390,000.

The requested funding will provide for:

(1) Operation and essential maintenance including cleanup and sanitation services for an expected 202.5 million visitor-days of recreation use.

(2) A program to initiate review of roadless areas identified as having potential for possible wilderness designation.

(3) A program to begin review with public involvement of the most critical problem areas on all National Forest lands to determine which should be open or closed to off-road vehicle use in accordance with EO 11644.

In addition, the budget proposes an appropriation of $1,260,000 for Construction and operation of recreation facilities (page 134).

The Forest Service manages recreation use through the National Forest System. The following tabulation shows the total planned financing for 1975 as compared with funds available in 1973 and 1974.

				Change		
	FY 1973	FY 1974	FY 1975	Pay Costs	Space Rental	Program
			(in thousands)			
Administration of concessions and recreation use permits	$1,569	$1,630	$1,680	$13	$50	-$13
Operation and maintenance	33,495	34,927	36,582	301	1,093	261
Planning and inventories	1,291	1,318	1,359	11	41	-11
Wilderness administration	2,935	3,015	3,108	25	93	-25
Visitor Information Service	2,763	3,780	3,793	32	113	-132
Total	42,053	44,670	46,522	382	1,390	80

The funding is needed for managing recreation use in the National Forests as an integral part of the overall Forest Service program. The funding will allow for basic services for the increasing number of recreation visitors to the National Forests. Basic services will be provided to cope with an expected 202.5 million visitor-days of use to prevent adverse environmental effects and infringement on other resource use of the National Forests. The use is a 2.2 percent increase over fiscal year 1974 and an increase of about 17 percent over use of 172.5 million visitor-days use in 1970.

The funding will provide visitor safety, enforcement of occupancy and use regulations, signing, and general services for operations, cleanup, sanitation, maintenance and management to protect the environment while offering recreation opportunities.

Project (2)

The National Forest recreation program includes many activities. These are classified into activities occurring in developed sites (such as campgrounds and ski sites) and dispersed areas (such as back country areas or wilderness). More than 60 percent of the use occurs in undeveloped areas. The following illustrates the variety of activities and the use occurring in 1972:

Activity			Public Use Visitor-Days	Public Use Percent
Camping			50,062,500	27.2
Picnicking			7,411,200	4.0
Recreation travel (mechanized)			42,274,700	23.0
Automobile	(36,231,500)	(19.7)		
Scooter and motorcycle	(2,910,200)	(1.6)		
Ice and snowcraft	(2,862,600)	(1.6)		
Other	(270,400)	(0.1)		
Boating			5,423,200	2.9
Power boats	(3,365,900)	(1.8)		
Self-propelled boats	(2,057,300)	(1.1)		
Games and team sports			771,000	.4
Waterskiing and other water sports			873,200	.5
Swimming and scuba diving			3,666,200	2.0
Winter sports			6,964,400	3.8
Skiing	(5,812,800)	(3.2)		
Other	(1,151,600)	(0.6)		
Fishing			15,457,100	8.4
Hunting			13,739,700	7.5
Hiking and mountain climbing			6,862,100	3.7
Horseback riding			2,616,000	1.4
Resort use			3,525,200	1.9
Organizational camp use			4,122,400	2.2
Recreation residence use			7,839,500	4.3
Gathering forest products			1,250,600	.7
Nature study			924,100	.5
Viewing scenery, sports, environment			7,073,900	3.8
Visitor information (exhibits, talks)			3,101,300	1.8
Total			183,958,300	100.0

A detailed explanation of financial needs follows:

(1) Administration of concessions and recreation special use permits ($1,680,000, increase of $50,000.)

About 13 percent of recreation use in the National Forests, or 26.1 million visitor-days use, will be accommodated by concessionaires (resorts, marinas, ski areas) and other recreation special-use permittees (organization camps, recreation residences). Private capital is used to develop facilities and to provide services while returning receipts to the Federal Treasury. In fiscal year 1973, receipts totaled over $4.6 million, an increase of $1 million over fiscal year 1972. It is estimated that receipts in fiscal year 1975 will exceed $5 million.

Funding for this item will be used:

(a) For plans, environmental reviews and statements, designs, prospectus preparation, and administration of new sites for concessionaire development and operation.

(b) To administer and review proposed expansion or improvement of facilities under existing special-use permits.

(c) To administer 1,780 concessions and over 20,000 recreation special-use permits.

Administration is necessary to assure compliance with permit stipulations which require environmental safeguards, satisfactory service, and that the sites continue to serve the purpose for which they were established. Requirements of the National Environmental Policy Act also make planning coordination and observance of construction activities essential.

(2) Operation and maintenance ($36,582,000, increase of $1,655,000.)

This item includes funding necessary to:

(a) Operate the recreation program in developed sites and general forest areas, including special areas such as National Recreation Areas, Wilderness, archeological and other special interest areas, wild and scenic rivers, and the National System of Trails. Operation includes such items as regulation of use (including off-road vehicle use) where necessary, cleanup and disposal of refuse in sites and general forest areas, providing for reasonable safety of visitors, fee collection and enforcement, and law enforcement. It also includes operation of a landscape management program to enhance and protect the visual qualities of the National Forests.

(b) Provide for maintenance of facilities reported as unsafe for public use and for emergency maintenance which is necessary to continue operation of needed facilities.

The funding level will continue to provide for basic needs of cleanup and disposal of refuse, providing sanitation and sewage treatment facilities, visitor safety, law enforcement, and signing in general forest areas and developed sites.

Dispersed recreation use such as hiking, riding, fishing, hunting, sightseeing and snowplay take place on the 187 million acres of general forest areas. In 1975, this type use will amount to about 124 million visitor-days, or almost 60 percent of all recreation use occurring on National Forest lands. Providing for cleanup, reasonable safety of users, minimal sanitation facilities, and law and regulation enforcement is a major job that will be accomplished at a basic level.

To protect environmental and resource values of general forest areas, the funds will also be used to implement requirements of E.O. 11644 regarding regulation of off-road vehicles. Studies and public involvement will begin on the most critical areas. Intensive management to enforce restrictions will be necessary.

The funding will allow continuing operation at current standards on 8,436 developed recreation sites. It will also provide for continued operation of another 237 sites within six National Recreation Areas. The developed sites have a capacity of more than 746,000 persons-at-one-time. Visitor safety, law enforcement, and refuse cleanup and disposal will be provided.

The funding will allow for increased costs associated with operation and maintenance of newly provided solid waste collection and disposal systems and sanitation and sewage treatment facilities. These have been developed to abate air and water pollution under the provisions of E.O. 11507 (disposal of solid waste) and E.O. 11514 (protection and enhancement of environmental quality) at a cost in excess of $50 million. Operating costs for the new solid waste collection and disposal systems are $2,446,000 annually. Operation and maintenance of the new sanitation and sewage treatment facilities will require $1,675,000 annually. Program adjustments will be made to provide these added programs, including off-season closures of recreation sites receiving little use, promoting user cleanup in remote and boat access campsites, deferring non-essential maintenance of other facilities, and closure of selected recreation sites which receive less than 10 percent of maximum design capacity.

Project (2)

Emergency maintenance and correction of unsafe conditions for all Forest Service recreation facilities in general forest areas and at developed sites will be accomplished.

The total funding will also provide for the cleanup and administration necessary to accommodate 600,000 visitor-days of use expected on over 2,000 miles of the Appalachian, Pacific Crest, and Gabrielino National Scenic Trails.

It will also provide for cleanup and sanitation within the 478 miles of Wild and Scenic Rivers System within the National Forests. It will provide for necessary operation to accommodate the 300,000 visitor-days of use these areas will receive. Cleanup costs are high due to difficult accessibility, and programs will be continued to encourage visitor self cleanup.

This funding will also allow a basic program to comply with E.O. 11593 in protecting and stabilizing historical sites, buildings, districts, and objects for which management decisions have been made in unit area plans and/or through informal classification as historical or archeological areas. The funding will also allow similar basic programs for other existing special-interest areas such as botanical, zoological and paleontological.

The funding requested will allow the development of procedural instructions and training programs for all National Forest land managers to insure that commodity uses, including timber harvest, which the National Forests must support are so planned and administered as to be compatible with the environmental and ecological integrity of all the landscapes involved. It will also allow a program for environmental protection and enhancement of National Forest lands. The availability of the scientific knowledge necessary to fully implement the intent of the National Environmental Policy Act of 1969 is dependent on a continuing cadre of specially trained landscape architects to participate in inter-disciplinary multiple use planning. The funding requested will allow for this continuing cadre of landscape architects for an intensified program in developing overall multiple use, environmental resource, and landscape plans assuring that timber harvest and other commodity uses are harmonious with the natural landscape.

(3) Planning and inventories ($1,359,000, an increase of $41,000.)

The proposed funding will allow for maintaining the 1959 to 1961 National Forest Recreation Survey and unit management plans, and the preparation of plans for management of areas specially classified by Acts of Congress.

A study of National Forest lands will be implemented with public involvement to determine areas to be open or closed to off-road vehicle use.

Funding will also allow for initiating compliance with the identification, inventory, and nomination requirements of E.O. 11593 as well as the protection and establishment requirements. This funding level is estimated to result in the annual nomination of approximately 250 properties to the National Register of Historic Places out of an estimated Service-wide potential of 5,000 properties. This should result in completion of the nomination program in approximately 20 years.

(4) Wilderness administration ($3,108,000, an increase of $93,000.)

Maintaining this level of funding will allow for a program of cleanup and sanitation on the 14.2 million acres of National Forest Wilderness and Primitive Areas.

Studies leading towards reclassification of Primitive Areas as directed by the Wilderness Act of 1964 will also remain on schedule to assure completion within the allotted time directed by the Act.

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Project (2)

Studies of roadless areas identified for possible future classification as wilderness will be initiated.

(5) Visitor Information Service ($3,793,000, an increase of $13,000.)

These funds will be used:

(a) To manage the second year of operation at Blanchard Springs Caverns on the Ozark National Forest in Arkansas.

(b) To continue the operation and maintenance at various Visitor Information Service facilities throughout the National Forest System at a lower level of manning.

Naturalist programs at visitor centers, information stations, amphitheaters, campfire programs, and along trails will be continued at slightly lower levels. Such programs contribute significantly to public understanding and appreciation of natural resources and their role in providing a quality human environment. These programs are the foundation of on-the-ground, people-to-people environmental and ecological education activities of the Forest Service.

Project (3)

WILDLIFE AND FISH HABITAT MANAGEMENT

1973	$7,857,000
1974	8,694,000
1975	9,230,000
Increase	+536,000

A net increase of $536,000 is proposed as follows:

(1) An increase of $230,000 for coordination of wildlife biological needs and requirements with timber sale activities.

(2) An increase of $66,000 to provide for the full year costs of the pay increase effective in fiscal year 1974.

(3) An increase of $261,000 to provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313.

(4) A decrease of $21,000 which reflects non-recurrent rehabilitation work in tussock moth infested areas to be accomplished in 1974.

The planned level of financing for fiscal year 1975, as compared with 1973 and 1974, is as follows (in thousands):

	1973	1974	1975	Change: Pay Costs	Change: GSA Space	Change: Program
Recurrent work	$4,282	$4,617	$5,021	$35	$139	$230
Habitat restoration and development	2,800	3,174	3,272	24	95	-21
Endangered and other threatened species	775	903	937	7	27	- -
Total	7,857	8,694	9,230	66	261	209

There is a real need to continue the intensified recurrent work segment of this program which includes the coordination of wildlife and fish habitat needs into timber management, road construction, and other development activities. This is especially cogent when considering the Forest Service program of accelerated timber

management which must be instituted to help meet the national need for wood products. To fully develop the opportunities of wildlife and fish habitat management through timber management programs, it is essential that the wildlife resource needs for both game and nongame species be coordinated into the planning, execution, and follow-up phases of Forest Service developmental programs.

Numerous opportunities exist to match cooperative proposals with the States for habitat restoration and development on National Forest System lands. Direct wildlife and fish habitat improvement programs with the States are in accord with the long-term cooperative agreements made with the various State conservation agencies.

Management and protection of the habitat for 58 endangered and other threatened wildlife and fish species found on or adjacent to National Forest System lands is of highest priority. The Forest Service land management program seeks increased protection, management, and survival of these species through habitat enhancement and maintenance. Quality habitat conditions are needed to insure survival and continued increases in the population status of these species.

(1) Recurrent work is the heart of the wildlife program which involves relatively fixed annual costs in relation to other resource uses and programs.

Coordination. Program activities such as timber harvesting, timber regeneration, timber stand improvement, recreation, road and trail construction, and reservoir construction can have adverse impacts upon wildlife and fish habitat unless development and land use activities are thoroughly coordinated with the environmental needs of the animals. To best accomplish this integration of resource use planning and provide adequate consideration for the fish and wildlife species, the expertise of trained biologists is required. Wildlife biologists are assigned to all regional offices and to a number of the National Forests to also work on multidiscipline planning teams and give technical guidance to this activity. The intensity of coordination determines the degree to which wildlife values are protected or enhanced. The control of animal damage to other resources also requires intensive coordination.

Cooperation. Cooperating with State conservation departments, the agencies responsible for protecting wildlife and regulating the harvest of game populations, is an important part of the Forest Service wildlife program. Habitat management on the National Forests is essential to the success of State fish and game programs because habitat and wildlife populations cannot be managed independently of each other. The States contribute a substantial share of the cost of habitat and fishing water improvements. In 1972 (most current available data) the States financed 45 percent of the habitat work on the National Forests. This amounts to an expenditure of about $1.2 million.

Surveys and plans. Evaluating wildlife, fish, and endangered and threatened species habitat, preparing or revising wildlife management plans, and assisting with multiple use planning, are continuing activities which are basic to an effective wildlife program.

Maintenance. Maintaining habitat improvements already in place is a recurring job that generally takes precedence over new development work. The States share in this work under terms of cooperative agreements.

(2) Habitat restoration and development include a wide variety of activities designed to increase wildlife and fish production for the use and enjoyment of the public.

Food and cover--developing either food or protective cover to enhance the quality of the wildlife environment. This is a broadbased program applicable on all Forest Service administered lands.

Wetland developments. About 90 percent of this work consists of marshland improvement for waterfowl in the north central States and the development of

greentree reservoirs along the Mississippi drainage. This work is extremely important in the total national effort to maintain waterfowl production.

Fish stream improvement--includes removal of migration barriers establishing in-stream improvement devices, mechanical gravel cleaning, streambank stabilization, streambank fencing, and construction of streamflow maintenance. Program emphasis will be directed toward the western forests and Alaska.

Fish lake improvement--includes development of new fishing lakes and the improvement of existing lakes. New lake development is a cooperative program with the State conservation departments.

(3) Endangered and other threatened species--include several activities directed toward improvement, protection and management of the habitat for 58 wildlife and fish species found on lands administered by the Forest Service.

Habitat maintained through coordination--coordination of other resource activities with programs for the protection and management of endangered and threatened species. Surveys, studies, and plans form the basis for implementing the prescribed environmental needs and requirements. Activities are coordinated and integrated into the programs of other Federal and State agencies having direct responsibility for management of the populations.

Plans and surveys--evaluation of endangered and threatened species habitat, preparing or revising wildlife management plans to best meet the multiple resource uses while continuing to provide maximum environmental benefits for these important species of wildlife.

Administrative studies--to effectively identify the critical limiting factors affecting the species through evaluative studies which will provide the guidelines necessary to future management of the habitat.

Direct habitat improvement--includes the development of food, protective cover, nesting areas, habitat enlargement and other enhancement measures to improve and maintain quality environment values.

Work accomplishments during 1973

A summary of total wildlife and fish habitat acres improved follows:

Food and cover development	335,804
Water development	180,160
Wetland development	7,630
Fish stream improvement:	
In-stream structures	1,128
Barrier removal	325
Spawnbed improvements	27
Channel fencing	549
Rough fish removal	479
Fish lake development:	
Spawnbeds and shelters	216
Aquatic plant control	1,591
Rough fish removal	1,371
New fishing lakes	3,097

Also, several thousand acres of wildlife habitat were improved through coordination efforts.

Examples of Recent Accomplishments

Programs to expand the range of the Atlantic salmon were undertaken in cooperation with the Bureau of Sport Fisheries and Wildlife, the State of New Hampshire (White Mountain National Forest), and the State of Michigan (Huron-Manistee National Forest). These salmon were taken in 1973 for the first time in history from Michigan's Au Sable River.

An item of special interest in 1973 was a cooperative venture with Hunt-Wesson Foods, Inc., involving the establishment of a National Children's Eagle Nesting Area on the Chippewa National Forest in Minnesota. Hunt-Wesson purchased four bald eagle nest sites involving 114 acres of private land which will be donated to the Forest Service.

Significant accomplishment was made by the Southern Region toward training both professionals and technicians in the use of the Forest Service Wildlife Habitat Management Handbook. Out-Service training sessions were given to the Alabama Professional Biologists Association; Eastern U.S. Air Force Game Managers at Eglin Air Force Base, Florida; Auburn University graduate students; U.S. Navy and Marine Base personnel from North Carolina, South Carolina, and Virginia; and Soil Conservation Service personnel in Arkansas. The Handbook is used as a text at Auburn University, Mississippi State, Louisiana State University, Virginia Polytechnic Institute, University of Kentucky, and Purdue. The Southern Region Handbook is also used as a supplemental reference by 15 additional colleges and universities, four paper companies, and six professional environmental statement firms. As a result, significant improvement in the timber-wildlife coordination activities is evident.

Public use and enjoyment of the wildlife resources continue to grow. This use includes both hunting and fishing and appreciative uses. In calendar year 1972, the estimated public wildlife use of Forest Service administered lands amounted to:

Hunter visitor-days	13,743,000
Fisherman visitor-days	15,470,000

(The visitor-day is a unit of measure amounting to 12 hours.)

In addition, there was an estimated 17.5 million days of appreciative use which includes bird and animal watching, wildlife photography, and forest visits to observe all forms of wildlife, including endangered and threatened species. Wildlife activities not only provide for an outdoor recreation experience and the suitable environment for all wildlife species, but it is also important from an economic standpoint. This is especially true in rural areas and communities. Estimated user expenditures for wildlife-oriented activities on the National Forests for fiscal year 1973 are as follows:

	Days Use*	User Expenditures** (in millions)
Appreciative (bird watching, photography)	17.5	$87
Big-game hunting	25.0	437
Small-game hunting	10.0	76
Waterfowl hunting	2.0	19
Freshwater fishing	58.0	365
Saltwater fishing	.4	4
Commercial salmon fishing	- -	31

*Days use--calculated from visitor-days use reports, using the following conversions:

(1) Each hunter averages 5 hours of hunting time per day.
(2) Each freshwater fisherman averages 4 hours of fishing per day.
(3) Each saltwater salmon fisherman averages 6 hours of fishing per day.
(4) Each bird watcher/photographer is estimated to spend 4 hours per day.

**User expenditures--based on average expenditures for sport fishing and hunting as determined in the National Survey of Fishing and Hunting (1970). For commercial fishing, the output value is based on the value of the salmon catch of fish spawned in waters within National Forests but caught in off-shore saltwater.

Project (4)

RANGELAND MANAGEMENT

1973	$15,516,000
1974	15,813,000
1975	16,474,000
Increase	+661,000

A net increase of $661,000 is proposed as follows:

(1) An increase of $133,000 to provide for the full year costs of the pay increase effective in fiscal year 1974.

(2) An increase of $532,000 to provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313.

(3) A decrease of $4,000 which reflects non-recurrent rehabilitation work in tussock moth infested areas to be accomplished in fiscal year 1974.

The rangeland management program is concerned with the management of some 105 million acres of National Forest System land for livestock grazing under policies that help maintain a quality environment and a viable rural economy.

This large and varied acreage of public range is divided into some 12,000 management units (allotments). Each of these forms a part of a ranch unit or, in some cases, a group of small ranch units.

National Forest System ranges are particularly important to ranch units and ranching communities in western United States. In the 11 western States some 14,000 ranch units representing 22 percent of the farms and ranches in those States, graze livestock on National Forest System range. Most of the National Forest grazing is seasonal and provides a critical link in year-round cattle or sheep operations.

About 7.6 million animal unit months of grazing are being currently provided to some 16,600 family-type ranching operations under a permit system which equitably allocates the grazing resource, regulates the grazing use under multiple use principles, and charges a fair and equitable fee.

The program activities include determination of resource capabilities, prescription and application of intensive range management techniques such as rest-rotation grazing, administration of permits, construction and maintenance of range improvements, range revegetation, control of livestock trespass, and control of resource damaging insects and diseases.

An additional management responsibility has come to the Forest Service with the enactment of Public Law 82-195 which provides for the protection, management and control of wild free-roaming horses and burros. The Secretaries of Agriculture and the Interior are charged with administration of the Act. The Secretary of Agriculture has directed that his responsibilities be carried out through the rangeland management program of the Forest Service.

The Forest Service immediately faces several tasks which are necessary to properly implement the Act. Much must be learned about the ecology and social structure of these animals over a great variety of climates and topography. Identification and separation must be made of privately owned animals which are roaming with wild ones. Regulations for protection of the wild horses and burros as defined by the law must be enforced and methods must be developed for controlling their numbers should they reach proportions which are incompatible with other uses of the National Forests.

Development and utilization of the National Forest System rangeland resource are based on the multiple objectives:

(1) To maintain environmental quality.

(2) To restore lands with deteriorated or unsatisfactory range condition.

(3) To produce forage and utilize grazing capacity at an intensity commensurate with economic efficiency and national demand.

(4) To contribute to the alleviation of problems in economically depressed areas and in areas with unique social characteristics.

(5) To contribute to rural economic development and stability.

(6) To promote the viable existence of the family type farm or ranch unit.

Resource (grazing permit) allocation systems, range environment analysis, supply and demand analysis, and economic efficiency analysis provide the basis for the procedures and priorities necessary to fulfill the program objectives. Through these studies, the efficient share of grazing demand to be produced on National Forest System lands, the most efficient intensity of management for each resource unit, and finally, several areas where the economic criteria is replaced with social criteria, have been identified. The following investment priorities have been established.

(1) Allotments having the greatest need for improvement of range condition.

(2) Allotments which contribute the most towards alleviating economic distress of rural residents and communities.

(3) Allotments which contribute the most to rural economic development in general.

Following are some examples of recent and planned accomplishments:

Activity	1973	1974	1975
Allotment plans maintained (No.)	6,169	6,369	6,569
Allotment plans initiated (No.)	200	200	200
Deteriorated range being treated (thousand acres)	9,598	9,890	10,182
Range revegetation (thousand acres)	157	160	160
Grazing Use:			
Cattle, including offspring (thousands)	2,729	2,750	2,775
Sheep, including offspring (thousands)	3,305	3,300	3,300
Animal unit months (thousands)	7,568	7,650	7,750

Project (5)

SOIL AND WATER MANAGEMENT 1/

1973	$13,795,000
1974	2/ 15,217,000
1975	15,215,000
Decrease	-2,000

A net decrease of $2,000 is proposed as follows:

(1) Increase of $270,000 for protection of critical soils and unstable slopes and enhancement of water production in support of the timber sale program.

(2) Increase of $94,000 to provide for the full year costs of the pay increase effective in fiscal year 1974.

(3) Increase of $438,000 to provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313.

(4) Decrease of $790,000 in planning, liaison and protection of Forest Service land in connection with water development projects of other agencies. There has recently been a lessening of effort in water project planning and new construction starts. The funds available will help avoid misuse of resources in the most sensitive situations.

(5) Decrease of $13,000 which reflects non-recurrent rehabilitation work in tussock moth infested areas to be accomplished in fiscal year 1974.

(6) Decrease of $1,000 due to change in amount for wild and scenic river studies on State and private lands transferred from this activity to general forestry assistance.

The total program for fiscal year 1975, compared with 1973 and 1974, follows:

	1973	1974	1975	Change: Pay Costs	Change: GSA Space	Change: Program
			(In thousands)			
(1) Soil and water science for management support	$7,232	$8,333	$8,900	$60	$237	$270
(2) Watershed restoration and improvement	1,954	2,029	2,088	15	57	-13
(3) Wild and scenic rivers studies	712	733	758	5	21	-1
(4) Environmental analysis and construction liaison	2,802	2,541	2,645	10	94	--
(5) Planning liaison and protection related to projects of water resource development agencies	1,095	1,581	824	4	29	-790
Total	13,795	15,217	15,215	94	438	-534

(1) Soil and water science for management support ($8,900,000, an increase of $567,000)

Emphasis will continue to be given to:

(a) Management services such as application of technical water, geologic, and soils knowledge to resource management and development activities; advice and counsel on design of specifications for resource management programs to meet specific water management objectives or to enhance soil productivity and avoid problems.

- - - - - -

1/ For comparability, following amounts for Wild and Scenic River Studies on State and private lands are shown under General forestry assistance rather than under Soil and water management as appropriated: 1973, $200,000; 1974, $159,000; 1975, $160,000.

2/ For comparability, surface, environment and mining (SEAM), $1 million, is shown under Minerals management rather than as appropriated under Soil and water management.

(b) Soil, water, and geologic resource inventories including interpretation and analysis. Inventories conducted by scientists provide basic information interpreted for both short- and long-term planning efforts in such areas as land use, timber management, range management, transportation systems, and the wild and scenic rivers program. As management and development activities move into remote and more fragile areas, minimal levels of basic information about the watersheds become essential as a basis for environmentally sound action.

(c) Surveillance and monitoring of National Forest uses and programs to assure that they are compatible with the protection of man's environment. Identifying areas with existing or emerging soil and water quality problems so that corrective action can be formulated and implemented.

The 390.4 million acre-feet of high quality water produced from National Forests is an example of the importance of water in the National Forest Program. In 1972, the dependent regional gross product for all water uses from National Forests averaged $1,157 per acre-foot of water produced, or a total of $167 billion. Protecting the clean water resource will result in substantial and varied social and economic benefits to all citizens.

Extreme demands are being put upon available water supplies, particularly in the West. The Congress and the courts have determined that the United States has a right to reasonable use of water on National Forests reserved from the public domain except those waters appropriated before the National Forests were created. Efforts are underway to obtain sufficient quantities of water in accordance with legal authority for the administration and development of the National Forest System. This project on a watershed basis includes:

(a) An inventory of present and foreseeable needs.
(b) A determination of water availability.
(c) An assessment of the potential for increasing yields in water-short areas.
(d) Action to secure the water needed for National Forest purposes.

The western States want the Forest Service to complete the inventory program as rapidly as possible. The field inventory of Forest Service consumptive water uses is essentially completed. A major part of the total project effort is expected to be completed by fiscal year 1978.

Additional work is developing due to adjudication proceedings in some western States. Increasing judicial and administrative action in water rights is anticipated, both on lands reserved from the public domain and on acquired lands, over the next several years.

Examples of Recent Accomplishments

Land use planning--the process for making decisions about long-term allocations of natural resources and the land base from which they are obtained--has received greatly increased emphasis in 1973.

Soil resource inventories were conducted on 15.6 million acres; detailed soil surveys were conducted on about 0.4 million acres in cooperation with the Soil Conservation Service and the State Agricultural Experiment Stations.

Resource protection requirements and design services were provided by geology, hydrology and soil scientists on more than 2,000 projects.

Soil and water condition and trend observations along with monitoring effects of timber management, mineral developments, Boundary Waters Canoe Areas, and suspected pollution problem sites where people physically use the water resource are underway at 2,000 locations. On the Los Padres National Forest in California a survey was made of watershed conditions that caused mudflows to occur as a result of the Molera fire in the Big Sur area.

Cooperative studies are continuing with State Fish and Game Departments to determine minimum flows necessary for fish culture in connection with Federal Power Commission relicensing of "run of the river" power facilities.

On the Tongass National Forest in Alaska, timbered slopes over the critical angle of repose were delineated on 4.5 million acres of land. Timber management procedures have been updated to reflect special considerations for these fragile areas.

(2) Watershed restoration and improvement ($2,088,000, an increase of $59,000)

The purpose of this continuing program is the restoration and maintenance of surface disturbed areas to enhance the quality of the environment and restore productive capacity of renewable resources. Projects include:

(a) The South Fork Salmon River Project (Idaho) where sedimentation has severely damaged anadromous and resident fisheries of regional and possibly national importance.

(b) The Palzo tract project (Illinois) where chemicals and sediment from old surface coal mining operations have seriously degraded water quality and caused the United States to be cited in court by State water quality authorities.

(c) South Fork Holston River and New River Watershed (Virginia) where sedimentation from old manganese mining operations affect stock water, wildlife and resident fisheries.

Restoring the hydrologic functioning of rural lands damaged beyond the point of natural recovery is essential to protecting the beauty and quality of the rural environment. This is a continuing program to:

(a) Meet soil stability and water quality requirements.

(b) Encourage the orderly development of watershed resources.

(c) Repair degraded watersheds.

(d) Provide continuing maintenance to projects completed to keep them effective.

The funds will be used to provide opportunities for utilizing the skills, and to furnish jobs and timely income for local people in rural areas of low income and critical under-employment. Illustrative of some of the specific activities are:

(a) Emergency treatment and maintenance for the highest priority areas in the 184,000 acres of National Forest System lands burned annually by wildfires.

(b) Being responsive to treatment and maintenance needs on thousands of miles of abandoned "orphan" roads and trails that are great contributors of sediment and uncontrolled runoff, causing local problems of flooding and the resultant inability of water supply to serve agriculture, domestic, or recreational needs.

(c) Maintenance and reinforcement on the highest priority areas of eroding and gullied land treatments installed during the last 5 years.

(d) Removal of debris in stream channels above reservoirs and in anadromous fish streams.

Improvement of the water resource by scientific management helps individuals and communities in rural areas improve their quality of life, and is an integral part of multiple use management.

In response to public demands, the water resource improvement activity for fiscal year 1975 will consist primarily of:

(a) Application of special treatments to capitalize on opportunities to improve water yield through regular ongoing activities such as timber harvesting, range revegetation, timber stand improvement, and fire control in water short areas.

(b) Maintenance of existing water resource improvement projects to insure continuing effectiveness of work done to date.

(c) Continuation of programs under cooperative agreement with Anaconda Company in Montana and with the Salt River Valley Users Association in Arizona.

Examples of Recent Accomplishments

Rehabilitation of damaged areas is progressing in all parts of the country, but much work still needs to be done. A computer program--CHAGCOM--has been developed to facilitate the design of gully stabilization structures.

Rehabilitation work is coordinated with other resource and service divisions to accomplish an integrated program of management under multiple use.

In fiscal year 1973, Forest Service crews treated and stabilized:

Acres of sheet eroded and deteriorated areas	36,000
Miles of streambanks and shorelines	350

Treatments to aid in restoring favorable watershed conditions on lands damaged by wildfire continued. Emergency measures (initial treatment on new burns and maintenance on older burns) were applied to 27 fires on 52,000 acres that required onsite protection and posed threats to life, property, public health, and watershed functioning.

(3) Wild and scenic rivers studies ($758,000, an increase of $25,000)

The purpose of this activity is to carry out comprehensive studies of rivers designated as potential additions to the National Wild and Scenic Rivers System. The Wild and Scenic Rivers Act (PL 90-542) named 27 rivers as potential additions to the national system. The Forest Service is the lead agency for the Department of Agriculture's river study work on nine of the 27 rivers. These nine are: Chattooga River in North Carolina, South Carolina, and Georgia; Flathead River, Montana; Illinois River in Oregon; Pere Marquette River in Michigan; Moyie, Priest, St. Joe and Salmon (main stem) Rivers in Idaho; and the Skagit River in Washington.

The program effort during fiscal year 1975 will essentially complete work on the St. Joe, Skagit, Salmon, Flathead and Pere Marquette Rivers, while making substantial progress on the remainder. All studies are cooperative efforts with States, Federal agencies, and other interested groups and individuals and they provide for employment of local people to collect resource data and data on resource use and capability.

Examples of Recent Accomplishments

The Department's report and recommendations on the Chattooga River were transmitted to the President and the Congress for their consideration. Also, the Flathead River proposal has been sent to all concerned Federal departments and agencies and to the Governor of Montana for review and comment. The river study report and draft environmental statement for the Pere Marquette River are in the process of being prepared.

(4) Environmental analysis and construction liaison with water resource development agencies ($2,645,000, an increase of $104,000)

Environmental analyses delineate the effects, define necessary mitigating measures, and identify enhancement opportunities relative to proposed water resource development associated with National Forests and National Grasslands. Reports resulting from such analyses document measures which are essential to the attainment of National Forest multiple use objectives and identify how National Forest management can contribute to project purposes to optimize their economic and social contribution to rural America. To be effective, the analysis and report must be concurrent with the construction agency's preliminary planning to permit their findings to be incorporated in the licensing or authorizing document.

Liaison with the construction agency during the construction period is necessary to facilitate coordination between the construction agency and the Forest Service. Protection of the land and resources, minimizing interference with regular protection and management activities, and facilitating construction agency operations are direct economic dividends derived from this program.

Experience has shown that without adequate analysis and liaison effort such as is provided by this activity, natural resources often suffer from enormous waste and misuse, and the project works fail to make their maximum contribution. Natural beauty and high quality water are among those resources most susceptible to loss. The rising value of forest resources and constant increase in demands against the declining resource base requires increased perception, scientific input and thoroughness in making environmental analyses and preparing reports.

Examples of recent accomplishments include environmental analyses and reports for Bath County Pumped Storage Project, Parr Shoals, Skidmore Fork Flood Control Project, and the Central Utah Project. In addition, construction liaison was carried out on such major developments as the California Water Plan and the ongoing elements of the Central Utah Project.

(5) Soil stabilization and cover improvement ($824,000, a decrease of $757,000)

The treatment of lands tributary to water resource development projects to reduce sediment yield or to modify the pattern of runoff lengthens the life and increases the utility of the water control structures. This work is done on National Forest System Lands tributary to the project, only where hydrologic analysis and other elements of the environmental analysis determine that such work is needed and that benefits to the project purpose are clearly established.

Treatment programs include the following:

(a) Modifying the vegetation to decrease erosion, to reduce flood peaks, and to increase the annual quantity and improve the timing of water yielded from the tributary lands.

(b) Clearing reservoir areas, where not done as part of construction, and keeping the reservoir free of debris to make the area safe for public use and to maintain scenic beauty.

Project (5)

(c) Land treatment measures such as contour terracing, gully plugs, headwaters debris and flow retarding structures, and streambank and shoreline stabilization measures.

Essential land treatment and related measures are planned at small watershed projects authorized by PL-566 and PL-534, and at other major reservoir projects. Treatment measures will include soil stabilization and vegetation management to improve water quality and quantity. Also, in order to provide for public safety and user enjoyment of reservoir areas, debris and stump removal will be accomplished on about 10,000 acres.

Recent accomplishments included the application of land treatment measures at Dry Creek, Cottonwood Creek, and Carpinteria PL-566 projects. Stumps were removed at some reservoirs comprising the Yakima Project and reservoir sweeping was done at major reservoirs where the Forest Service has management responsibilities.

Project (6)

MINERALS MANAGEMENT

1973	$2,893,000
1974	1/ 4,436,000
1975	4,630,000
Increase	+194,000

An increase of $194,000 is proposed as follows:

(1) To provide for the full year costs of the pay increase effective in fiscal year 1974, $29,000.

(2) To provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313, $165,000.

(1) Surface environment, and mining program ($1,030,000, an increase of $30,000 for space rental)

SEAM is a research, development and application program designed to provide an innovative array of economical and effective surface mine reclamation alternatives which satisfy environmental, energy, and mineral needs. The direct end product of SEAM will be several demonstration areas where new techniques in planning of mining operations, new methods of rehabilitation, and environmental stewardship criteria can be evaluated and displayed.

The 1974 Appropriation Act for the Forest Service provided $1.7 million for SEAM in 1974--$1.0 million for Forest land management and $700,000 for Forest watershed management research. The ongoing programs of other USDA agencies also contribute to the objective of developing techniques for surface mine rehabilitation.

SEAM is an on-the-ground problem-solving effort initially concentrated in the West. SEAM is a partnership undertaking with land managers, the mining industry and political jurisdictions. It will be closely coordinated with ongoing Federal and State programs.

The development and application funds for SEAM in fiscal year 1974 will be used to begin meeting six basic objectives:

- - - - - -

1/ For comparability, surface environment and mining (SEAM), $1 million, is shown under this activity rather than as appropriated under Soil and water management.

Project (6)

Objective A. Determine and evaluate the environmental impacts of mining and related activities both on site and on surrounding areas. Identify and display alternatives.

Objective B. Determine and evaluate the socio-economic impacts of mining and related developments with emphasis on rural areas. Identify and display alternatives.

Objective C. Develop alternative engineering systems to prevent or reduce future environmental damage.

Objective D. Develop alternative land treatments designed to return or transform disturbed areas to beneficial use.

Objective E. Develop alternative institutional, legal, and physical criteria for use in coordinated planning and administration of mineralized lands.

Objective F. Assemble, synthesize, test, and evaluate alternative systems and practices on demonstration areas. Assist land managers, industry, and regulatory authorities in applying such systems and practices on a broad scale.

Specifically the work will include:

(1) Assembling existing inventory data, operationalizing remote sensing techniques and classifying and stratifying areas in land units to predict environmental responses.

(2) Assembling and systematizing appropriate socio-economic data to determine cultural effects of mining on rural communities.

(3) Acquiring equipment for collecting, processing, and planting seed or plants on disturbed areas and demonstrating sound techniques for mechanically stabilizing areas disturbed by mining.

(4) Use of research results at plant material centers to develop, propogate, and disseminate seed and plant materials.

(5) Development of guides and criteria to evaluate quality of mining plans.

(6) Providing guides, technical service and demonstration of equipment and methods to industry and land managers.

(2) Mineral claims, leases, and permits ($3,600,000, an increase of $29,000 for pay costs and $135,000 for space rental)

For the most part, activities under the 1872 mining law are subject to little restraint by Federal and State laws. Safeguarding surface resources and avoiding occupancy trespass are therefore dependent upon timely--sometimes daily--contact with mining claimants. This requires time-consuming, costly trips by forest officers to the sites of such activities, many of which are located in remote areas having difficult access.

If such contacts are not made, improperly located and poorly designed access roads are often built. Such roads cause soil erosion, muddy streams, and unnecessary damage to esthetic values. Frequent inspections are also important in precluding trespass. Many persons, attracted by recreational opportunities in the National Forests, find it easy to abuse the 1872 mining law by erecting or maintaining residences on claims--ostensibly for legitimate mining purposes, but actually for use as vacation homes, year-round residences or hunting camps. Once such residences are built, even though no serious attempts are made to mine, and occupancy is clearly recreational or for some other non-mining purpose, their removal typically takes several years and thousands of dollars in public funds. In most cases, a mining claim must be found inadequate in mineral

content after competent examination and declared invalid in a Department of the Interior proceeding before action can be taken to actually remove a residence. Unless promptly removed, after a claim is declared invalid, a habitable residence invites new mining claimants. Vigilance and lengthy discussions with claimants concerning the prerequisites which must be met before a residence can be lawfully built or maintained are necessary to inhibit such trespasses. Failure to prosecute these cases encourages more trespasses. As of January 1, 1973, there were almost 1,400 habitable structures on mining claims in California's National Forests. Most of these structures are on claims of doubtful validity and, if occupied, for non-mining purposes, constitute trespasses on Federal lands.

Administration of new regulations governing the occupancy and use of National Forest lands under the 1872 mining law will require the filing of operating plans which will be approved contingent upon adequate measures to protect surface resources and rehabilitate disturbed areas. Frequent contacts with operators and on-the-ground inspections will be necessary to check on adherence to approved operating plans. With the intensity of exploration increasing, especially for copper and gold deposits, demands for timely review and approval of operating plans should rise markedly.

Operations under the mineral leasing acts, particularly those associated with exploration and development of fuels (oil, gas, and coal) are expected to increase. These, too, require review and approval of operating plans to protect the environment. Timely action on applications for leases and permits and frequent inspections are necessary so as not to adversely affect energy availability, while providing protection for surface resources.

Examination of mining claims is a time-consuming job for qualified mining engineers and geologists. To protect the public interest and encourage bona fide development, it is necessary to examine and report on claims:

(1) For which patent applications have been filed.

(2) Of doubtful validity that are being misused or that conflict with Forest Service programs.

(3) Located in wilderness where applications for prospecting or mineral development permits have been filed.

The mineral leasing job requires:

(1) Review of applications for prospecting permits and leases to determine if mineral activities are compatible with other uses.

(2) The preparation of stipulations and operating plans to protect the environment.

(3) The preparation of mineral title reports on all acquired lands.

(4) On-the-ground administration to ascertain that terms of leases, permits, stipulations, and operating plans are understood and followed.

Fiscal year 1975 anticipated workload as compared with fiscal years 1973 and 1974 follows:

Project (6)

	1973	1974 estimated	1975 estimated
Surface resource protection and management of mining claims (claims)	20,172	29,000	24,000
Mining law compliance and validity determination (claims)	6,042	4,500	4,500
Mineral leasing and surface resource protection (No. of leases requiring action)	8,582	9,000	12,000
Surface management of mineral reservations and rights outstanding (No. of cases requiring action)	1,035	1,200	3,100
Mineral material disposal (No. of permits or leases requiring action)	2,479	2,500	2,700
Mineral withdrawals and mineral character determinations (acres)	601,700	650,000	5,300,000

Examples of Recent Accomplishments

Mining claims. New reserves of uranium, copper, silver, gold, lead, zinc, and molybdenum continue to be in great demand by mining companies. Management of surface resources on mining claims was accomplished on over 20,000 claims during fiscal year 1973. Approximately 6,000 mining claims were examined for compliance with the mining laws during the year. There were 71 mineral patent applications, involving 385 claims, pending at the close of calendar year 1972. Actions on 252 claims were completed during this period; 2 claims (applications) aggregating 45 acres were patented during the calendar year.

Mineral leases and permits. Demand for low-sulphur coal that will reduce air pollution in urban area continues to be very high. Exploration for oil and gas and phosphates continues at a high level. Some 8,600 leases and permits were active during fiscal year 1973, thus requiring Forest Service administration to protect the environment and coordinate uses. Nearly 2,500 sales and free use permits were granted, involving disposal of common varieties of mineral materials. More than 1,000 mineral operations were active on acquired lands as a result of reserved or outstanding mineral rights. These require action to avoid or reduce environmental degradation.

Total revenue from leases and permits on acquired lands amounted to $6,777,509 during fiscal year 1973. In addition, an estimated $27 million was received from leases and permits on public domain lands.

Project (7)

FOREST FIRE PROTECTION

1973	$32,639,000
1974	36,359,000
1975	36,518,000
Increase	+159,000

A net increase of $159,000 is proposed as follows:

(1) An increase of $210,000 for hazard reduction and fire prevention in support of the timber sale program.

(2) An increase of $326,000 to provide for the full year costs of the pay increase effective in fiscal year 1974.

(3) An increase of $1,847,000 to provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313.

(4) A decrease of $1.4 million appropriated in 1974 for procurement of ten units of the Modular Airborne Fire Fighting System.

(5) A decrease of $824,000 which reflects non-recurrent timber salvage and rehabilitation work in tussock moth infested areas to be accomplished in fiscal year 1974.

The objectives of National Forest Fire Protection Program are to:

(1) Provide for public safety and prevent loss of human life to wildfire.

(2) Protect forest resources and hold property losses to levels consistent with land use objectives.

(3) Reduce the flammability of all forest lands.

(4) Use and manage fire to increase productivity and achieve land management objectives.

(5) Promote professional fire management practices to protect and improve environmental quality.

(6) Accomplish the above economically.

This program is to lower the flammability of forest and rangelands resulting in greater protection of lives, property and resources. The quality of the environment is improved through scientific smoke management and application of sound fire management practices including the prescribed use of fire. Uncontrolled fires become less tolerable each year as the interface between rural and urban areas increases.

Land and resources protected by the Forest Service are subject to more use by recreationists, travelers and others for special purposes, collectively increasing the risk from man-caused fires. Paradoxically, response of the land to good management practice often creates combustible fuels where few existed before. The challenge is to meet the burgeoning problem of increased hazard and risk. Where possible, effort has been made to make improvements in fire prevention, preparedness, suppression, and modification of fuels to increase effectiveness and efficiencies.

The proposed budget will be used to finance protection measures approximately as follows:

29-393 O - 74 - 68

Protection Measure	1973	1974	1975	Project (7) Change: Pay Costs	GSA Space	Program
			(In thousands)			
Fire prevention	$6,808	$8,346	$8,977	$82	$449	$100
Fire detection	4,256	3,445	3,723	35	183	60
Fire attack forces	15,492	15,522	16,560	150	838	50
Air operations	4,403	4,270	4,542	40	232	- -
Fuel modification	545	1,498	1,630	15	117	- -
Equipment development and testing	535	470	500	4	26	- -
Modular Airborne Fire Fighting System	- -	1,400	- -	- -	- -	-1,400
Studies, surveys, plans and training	600	584	586	- -	2	- -
Tussock moth infested areas	- -	824	- -	- -	- -	-824
Total	32,639	36,359	36,518	326	1,847	-2,014

Examples of Recent Accomplishments

Fire training and safety. National fire training emphasis in 1973 focused on production of multi-media training materials in fire and air operations. The thrust was to improve effectiveness, increase efficiency, and develop safe work habits of fireline worker and air operations personnel.

A major effort in fire safety resulted in an improved safety record overall. Action on major fires using 10,000 people from every part of the Nation without serious injury attests to the success of this effort. The Off Fire in California and Freezout Fire in Oregon are specific examples of fires fought under extremely tough conditions without major injury.

Two fatalities in California, however, emphasize the need for increased efforts in safety and training fire crew personnel.

Fuel treatment. Work in this program consists of constructing new fuel breaks, maintaining existing fuel breaks, making vegetative type conversions in highly hazardous fuel areas, cleanup of forest debris along roadsides, and treatment of undesirable forest fuels to maintain the environment and achieve ecological benefits.

Continued progress is being made in lowering the flammability of forest lands. About 250,000 acres of excessive national fuels were reduced in fiscal year 1972 to improve the forest environment.

Fuel treatment work programed as a result of the fiscal year 1972 supplemental funding of $5 million is about completed. As an example, within the National Forests of Washington and Oregon, approximately 3,900 acres of fuel type conversion has been done and 130 miles of fuel breaks have been constructed.

Air operations. Improvements on the prototype were completed and the first Modular Airborne Fire Fighting System (MAFFS), a detached fire retardant delivery system developed with the Air Force, was field-tested. Over 20 drops were made under simulated conditions in mountainous terrain and 24 drops were made on actual fires in Montana, Idaho, and California. All results were favorable and the procurement of 10 units is planned in fiscal year 1974.

Progress continues toward interagency standardization of air operations procedures with the development of a single air tanker services contract acceptable to both Bureau of Land Management and Forest Service.

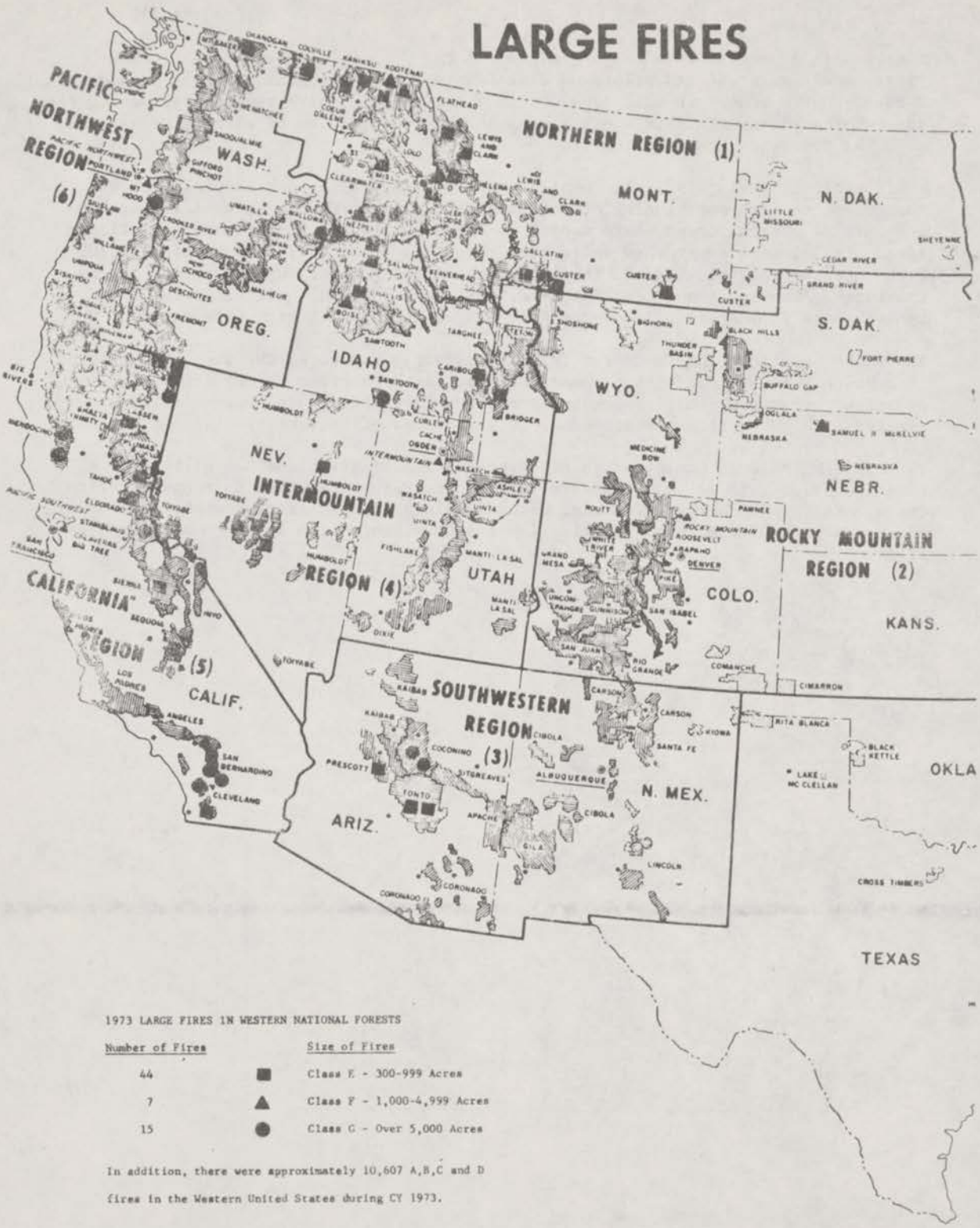
A test project was started on the evaluation of some modern military night vision technology and equipment. The objective is to find some aids for operating helicopters at night to make more efficient use of hours of darkness in fighting forest fires. Initial tests indicate the night vision goggles have a high potential for Forest Service work.

A national inspection team was organized for the purpose of checking air tanker firms, their aircraft and pilots on a pre-award basis to standardize the procedures. Other agencies concur in this type of operation and will have representatives on the team where needed. This is another step in the coordination of efforts, especially with the Bureau of Land Management.

Mobilization. During 1973, the mobilization effort was in both initial attack forces and the pre-positioning of reinforcement crews. The success of strengthening initial attack forces where needed is borne out by the fire record. Of 11,866 fires, 11,363 were suppressed while less than 10 acres. Only four out of each 100 fires escaped initial attack. The increase and decrease of initial attack forces consisted of moving ground tankers, tractors, smokejumpers, helitack crews and smokechasers from areas of moderate fire danger to areas of high fire danger.

The Boise Interagency Fire Center (BIFC) constantly monitored the fire situation throughout the West during the summer months. As situations became critical, organized crews and other resources from a low fire danger area were alerted or started enroute to fire-threatened areas in advance of request by field units.

Through BIFC role in coordination of aircraft, mobilization and demobilization of firefighters, it is estimated several million dollars were saved in transportation costs. It is also believed acreage burned would have been greater without planning and coordination in movement of firefighters from controlled fires to uncontrolled fires.

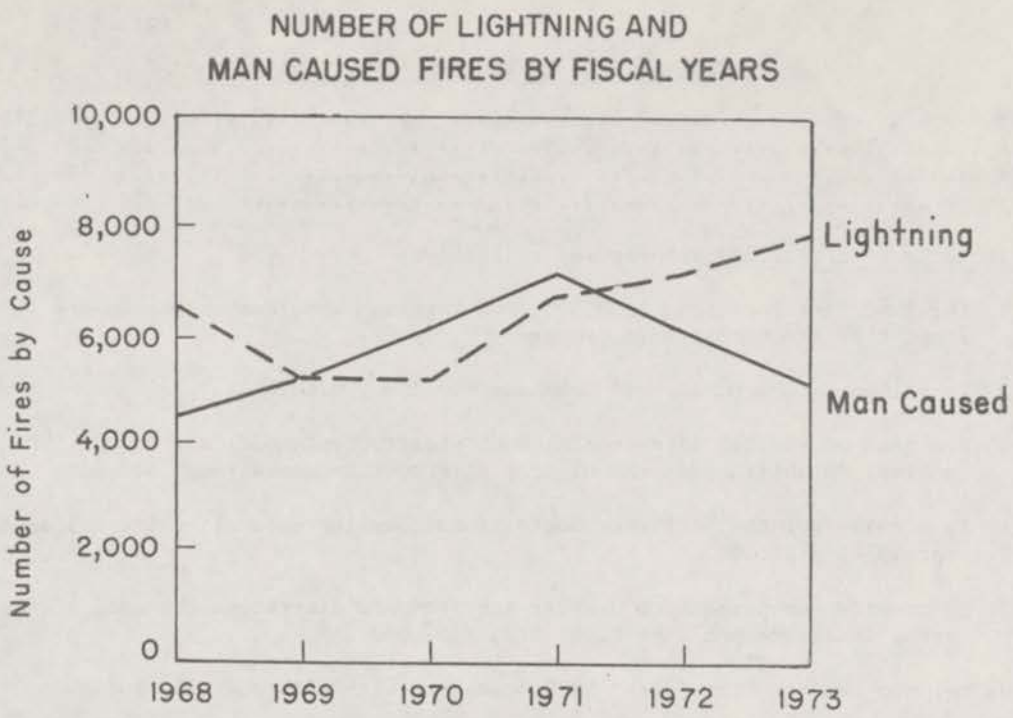


1973 LARGE FIRES IN WESTERN NATIONAL FORESTS

Number of Fires		Size of Fires
44	■	Class E - 300-999 Acres
7	▲	Class F - 1,000-4,999 Acres
15	●	Class G - Over 5,000 Acres

In addition, there were approximately 10,607 A,B,C and D fires in the Western United States during CY 1973.

Figure 7-1


NUMBER OF LIGHTNING AND
MAN CAUSED FIRES BY FISCAL YEARS
Number of Fires by Cause
10,000
8,000
6,000
4,000
2,000
0
1968
1969
1970
1971
1972
1973
Lightning
Man Caused

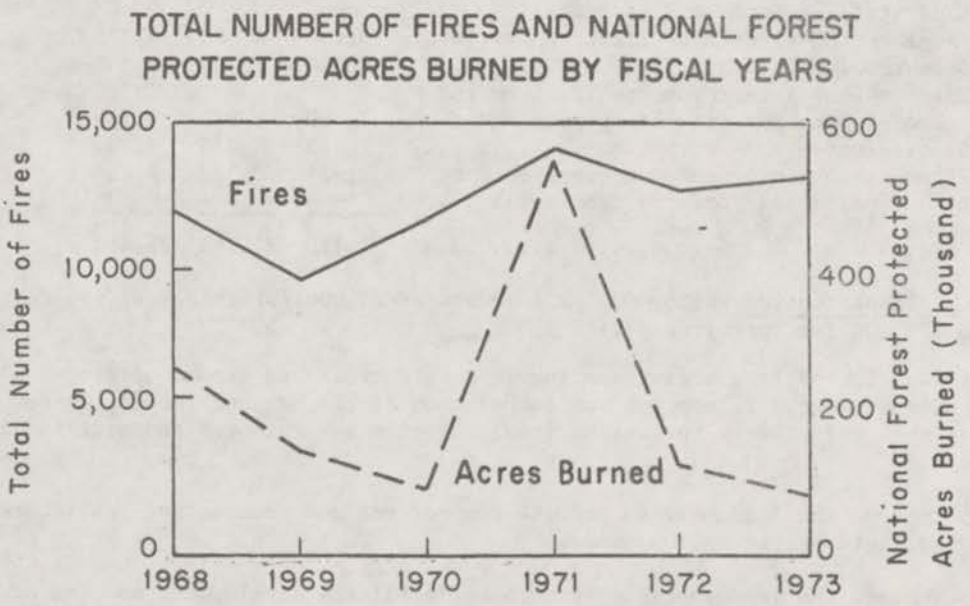

TOTAL NUMBER OF FIRES AND NATIONAL FOREST
PROTECTED ACRES BURNED BY FISCAL YEARS
Total Number of Fires
15,000
10,000
5,000
0
600
400
200
0
National Forest Protected
Acres Burned (Thousand)
Fires
Acres Burned
1968
1969
1970
1971
1972
1973

Figure 7-2

Project (8)

GENERAL LAND MANAGEMENT ACTIVITIES

1973	$21,110,000
1974	24,741,000
1975	26,460,000
Increase	+1,719,000

An increase of $1,719,000 is proposed as follows:

(1) For land line location, $100,000, for marking land lines and monuments in support of the timber sale program.

(2) To reimburse the Employees' Compensation Fund, $560,000.

(3) For cost of special Bicentennial and Forestry Centennial edition of the booklet, "Highlights in the History of Forest Conservation," $20,000.

(4) To provide for the full year costs of the pay increase effective in fiscal year 1974, $185,000.

(5) To provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313, $854,000.

The total program for fiscal year 1975, compared with 1973 and 1974 follows:

	1973	1974	1975	Change
		(in thousands)		
(1) Land classification	$461	$787	$825	$38
(2) Land exchange	3,446	3,681	3,853	172
(3) Land status records and cadastral engineering (land line location)	3,144	4,088	4,375	287
(4) Geometronics	1,144	1,298	1,358	60
(5) Maintenance of improvements for fire and general purposes (including communications)	7,909	8,972	9,385	413
(6) Special uses--non-recreation	2,875	3,615	3,784	169
(7) Payments to Employees' Compensation Fund	2,131	2,300	2,860	560
(8) Bicentennial and Forestry Centennial	- -	- -	20	20
Total	21,110	24,741	26,460	1,719

(1) Land classification ($825,000, an increase of $8,000 for increased pay costs and $30,000 for space rental.)

The function of land classification is to structure and recommend programs concerning the extent, location and composition of the National Forest System that will most effectively further national objectives. Purposes and activities are to:

(a) Improve the land base to provide for current and prospective public needs for outdoor recreation space.

(b) Improve the landownership pattern to facilitate development and use of recreation, timber, range forage, water, and wildlife resources which can contribute to growth of rural economies.

(c) Encourage land adjustment for protection and improvement of watersheds.

(d) Promote stability and encourage economic growth of communities in and near areas in the National Forest System.

(e) Improve efficiency in the administration of natural resource programs.

(f) Improve land use patterns to promote the preservation and enhancement of the environment.

(g) Survey the degree of utilization of public lands pursuant to Budget Circular A-2.

Financing at the level indicated will enable Forest Service to meet pressing needs for:

(a) Identification and detailed analyses of areas within and adjacent to the National Forests and Grasslands to determine the land exchange and land consolidation which should be made to best accomplish national objectives, including the Hells Canyon-Snake River proposal. Of particular urgency are Forest Service intensive unit planning projects and joint agency planning efforts.

(b) Determination of the merits of opportunities to transfer Federal lands to or from the National Forest System, including consideration of lands claimed by Indians, and jurisdictional transfers at numerous Federal water control projects important for outdoor recreation.

(c) Analysis and classification of lands with potential for national recreation areas, monuments, wildlife preserves, or other special status.

(d) Continuing action on Alaska native selections of land, cooperation with the Department of the Interior on proposed additions to the four national conservation systems, and other activities required as a result of the passage of the Alaska Native Claims Settlement Act.

(e) Consideration of applications made by the State of Alaska for State land selections.

(f) Continuing follow-up action on the disposition of public lands surveyed pursuant to Executive Order 11724.

Continual review of the location and extent of the National Forest System components is desirable to determine the direction land use and ownership patterns should take in relation to new developments and needs. The 155 National Forests and 19 National Grasslands located in 44 States and Puerto Rico include nearly 40 million acres of non-Federal land. Programs for consolidations of landownership within existing boundaries of these units need to be based upon sound consideration of their short- and long-range effects.

Examples of Recent Accomplishments

(1) Participation with the Department of the Interior in the analysis and formulation of recommendations for proposed additions to the National Forest and other permanent Federal conservation systems in Alaska.

(2) Transfer of 6,000 acres of the Savannah River AEC Project lands to the Forest Service for multiple use management.

(3) Completion of the Cascade Head-Salmon River Oregon Study and Report which delineate alternative means of protecting this unique area.

(4) Interchange with the Corps of Engineers completed at Lake Clark Hill, South Carolina, and Wynoochee Dam, Washington.

(5) Studies of Indian land issues involving the Mescalero-Apache, the San Carlos-Apache, the Mission Indians, and the Bay Mills Indians resulting in establishing agency positions on these matters.

(2) Land exchange ($3,853,000, an increase of $138,000 for space rental and $34,000 for increased pay costs.)

Properly conceived land exchanges result in alleviating the need to construct certain road segments, the location and marking of property lines, the issuance of certain special-use permits, and other management costs. The consolidation of ownership through land exchanges results in a $10 cost avoidance for every dollar spent in accomplishing the program. Selected examples of estimated cost avoidance which will result during the next 10 years, from the fiscal year 1975 exchange program, are:

Reductions	Units	Amount (in thousands)
(a) Property lines and corners	1,030 miles	$1,236
(b) Road construction and maintenance	75 miles	3,750
(c) Use permits and occupancy trespass	300 cases	1,200
(d) Road right-of-way needs	190 cases	114
Total		6,300

Material revenue increases to the United States Treasury can also result through well planned exchanges. Access road problems can be eliminated and make heretofore inaccessible mature timber stands available for harvest to the mutual benefit of the United States and timber companies in need of timber supplies. The rural economy is also benefited. Significant benefits can be realized for both the United States and private owners engaged in livestock operations through the consolidation of ownerships, thus reducing costs and improving management of the ranges.

Carefully designed land exchanges can make material contributions in bettering rural America and the communities located within or near the boundaries of the National Forest System. Farmers and ranchers operating marginal operations can frequently acquire the adjoining National Forest System lands suitable for grazing, thus permitting development of an economic unit. Communities are frequently aided through exchanges that provide lands for expansion and development.

The fiscal year 1975 land exchange program will involve the examination and appraisal of 200,000 acres involving an estimated 250 proposed exchanges. The land the Government gives and receives in exchanges must be examined and appraised. Following examination and appraisal, negotiations are expected to be completed and 200 cases approved during the fiscal year involving a total of 160,000 acres.

Examples of Recent Accomplishments

In fiscal year 1973, 129 land exchanges were approved. In these exchanges, the United States will acquire 57,821 acres valued at $14,218,819 and will grant 29,718 acres valued at $13,351,691. A total of 150 land exchanges were fully completed with title to 81,124 acres passing to the United States and 51,186 acres passing to the other landowners. The net increase in National Forest acreage was 29,938.

(3) Land status records and cadastral engineering (land line location) ($4,375,000, an increase of $100,000 in support of the timber sales program, $153,000 for space rental, and $34,000 for increased pay costs.)

(a) Land status records. This is a systematic search of records and the presentation in plat, tabular record, and supplementary form of all ownership interests, and Congressional and administrative actions which limit or otherwise affect administration of the National Forest System or the use of adjoining lands by the owners thereof. It is the record of what land interests the Forest Service must administer. Significant progress is necessary to meet the expanding need for correct currently available records of Forest Service landownership, use, and encumbrances.

Project (8)

The National Forest System was created and altered to meet changing needs by many Acts of Congress and administrative actions in accordance therewith. Some 160 million acres were reserved from the public domain.

Over 27 million acres were acquired by several agencies of Government. Over the years many exchange, acquisition, and disposal actions have occurred. The great number of records of the status of such lands as to ownership, encumbrances, and restrictions on use were never satisfactorily assembled, checked, and placed in a system readily used and currently maintained as changes occurred. As a result, the Forest Service has been handicapped in meeting the impact of the vast increase in resource use in recent years.

A system has been developed to assure that accurate status information is assembled and records kept current at a central point and supplied to all field offices of the Forest Service. In converting to this system, all public records are reviewed and entered. Maintenance of records is done in the nine regional offices and supplied currently to some one thousand field offices. Time devoted to maintenance of the converted records has slowed down conversion of the remaining records. The project is over 85 percent completed. The conversion job is scheduled for completion by the end of 1976.

The systematic search and review of records in the conversion project continues to reveal, and identify more clearly, many parcels and general areas which have previously been misunderstood, identified inaccurately, or overlooked in administration due to inadequate records and poor identifying ties between records and ground location.

Users of these system records (Forest Service and other Government agencies, adjoiners, and other public users) are enthusiastic about them. They give confidence in administration and reduce areas of potential ill-will with adjoiners and users of public and private resources.

Work Proposed for 1975	1973	1974 planned	1975 estimated
Townships completed	900	900	900

(Total program: 15,561 mapping units--accomplished through calendar year 1972 - 12,862)

(b) Cadastral engineering (land line location). Accurate plainly marked property lines are essential to effective management of lands and the land based resources. Significant progress in this activity must be made so that National Forest lands can be managed to meet Forest Service multiple use-sustained yield policy and contribute to the stability and growth of the rural economy.

There are about 272,500 miles of property lines between National Forest System lands and adjoining land owned by others. Presently, only about one-tenth of these property lines are adequately located and marked.

About 1,160,500 property corners are required to locate and perpetuate these property lines, with an additional 210,900 corners not on the property lines but needed to control the property corners. Many of these corners were established 50 to 200 years ago. A large share of them have disappeared because of neglect, carelessness, and destructiveness. Many have not yet been established.

Corner search under this program has revealed that about 30 percent of previously established corners are missing and must be restored through relatively expensive cadastral surveys. The search also reveals that many corners are in such poor condition that their loss is imminent unless quick action is taken.

Project (8)

The following has been accomplished since the program was initiated in 1958:

Fiscal Year 1958 - 1973

Corners:

1. Searched		303,315
2. Found acceptable evidence of corner		214,099
(a) Do not need remonumentation		54,506
(b) Need remonumentation		159,593
(1) Remonumented by Forest Service	92,949	
(2) Remonumented by Bureau of Land Management/ Forest Service cooperation	46,813	
3. No acceptable evidence of corners found, cadastral surveys needed to establish corners		89,216
(a) Corners established by Forest Service cadastral surveys	38,660	
(b) Corners established by Bureau of Land Management cadastral surveys	16,317	
4. Miles of cadastral surveys run to reestablish missing corners and establish new corners required:		
(a) By Forest Service	14,752	
(b) By Bureau of Land Management	8,243	

Property Lines:

Miles marked to standard	19,344
Miles marked to interim standard	10,508
Miles inspected and maintained	4,347

The Forest Service has been fairly successful in obtaining help and support in this work from some of the adjoining landowners.

Most of the activity to date has been to search out and preserve "thread hanging" corners to prevent their complete loss. For every such corner found in time and preserved, a future expenditure of about $1,000 for a cadastral survey is saved. The average cost to search out and permanently preserve a corner by remonumentation is $100.

Trespass that results in costly litigation and time-consuming "untangling" procedures can be mostly eliminated by timely and adequate marking of property lines.

Since 1966, an annual transfer of the appropriation for this program has been made to the Bureau of Land Management, Department of the Interior. The money was used for urgent cadastral surveys to reestablish property corners that were determined to be lost through the Forest Service corner search activity. In fiscal year 1975, $500,000 is planned for transfer to BLM.

The work to be done under the cadastral program is shown in the following table. This work is carried on in every State in which the Forest Service administers land.

Work Proposed for 1975 as Compared with 1973 and 1974

	FY 1973 (Accomplished)	FY 1974 (Planned)	FY 1975 (Planned)
Corners (Nos.)			
Search	24,457	29,500	32,300
Remonument	12,637	13,500	14,800
Establish	6,606	3,500	3,800
Maintenance	2,802	2,500	2,500

Project (8)

	FY 1973 (Accomplished)	FY 1974 (Planned)	FY 1975 (Planned)
Boundaries (miles)			
Locate and mark:			
To full standard	2,458	1,500	2,200
To partial standard	410	1,000	1,000
Maintenance	588	1,000	1,000

Examples of Recent Accomplishments

The accomplishment since 1958 in comparison to the total inventory of property corners and lines is as follows:

Corners searched	26 percent of total
Property lines marked	9 percent of total

Work has been programed in areas of most urgent need, thus obtaining maximum immediate benefits.

One-third of the corners revealed as missing by the corner search phase to date has been reestablished by cadastral surveys. This work is also done where most urgently needed, thus obtaining maximum immediate benefits.

Recently, the first operational model of a laser beam system for surveying property lines was successfully field tested. The system was developed for the Forest Service by the National Aeronautics and Space Administration.

The "laser range pole" system was designed to allow direct projection of straight lines between adjacent property corners, whether terrain is mountainous or heavily forested. Thus surveyors can "sight" directly between two points a mile apart, no matter how rough the terrain or how dense the forest. With the laser sender at one point, a beam is pulsed straight up, perhaps as high as a mile. From the second ground point, a sensor, or receiver, detects the pulse. The receiver is locked in at the exact direction and its sighting device is lowered to ground level where, within sight of the receiver, a surveying crew can mark the exact direction on the ground. The line is then extended by the regular sighting and marking methods back to the laser firing point.

Operational tests in Colorado on National Forest boundaries recently showed the system was accurate within three inches over a mile course. The tests also indicate that the system may reduce the cost of survey between corners already established by two-thirds. This could save millions of dollars and many man-years of work over the next few years. Portions of fiscal year 1975 funds are planned for purchase of "laser range pole" systems.

(4) Geometronics ($1,358,000, an increase of $48,000 for space rental and $12,000 for increased pay costs.)

Multiple use planning requires a knowledge of the terrain, the extent and location of the natural resource and how they are tied in with, and related to, existing and planned management programs within a planning unit. Environmental information is essential in the planning of timber sales and related facilities.

Technological advancements have provided new means of improving and intensifying management of National Forest resources and related facilities. These advancements promise significant reductions in field-going operations and ultimately cost and manpower savings. Investigations are underway to provide more comprehensive and efficient methods for recording, storing, retrieving and displaying interrelated terrain and resource data. Digitizing various forms of data for computer handling is an essential element in this process. These displays are in various forms-tabular data, seen area plats, slope and aspect maps, resource layers, orthophotos and engineering data.

Most of the resource information has been compiled by the appropriate functional specialists. It consequently has been displayed on a wide variety of maps and graphics. This fragmented approach is a time-consuming task.

In response to the need for a less time-consuming and costly task, the Multi-layer System has been developed. The objective will be to ultimately incorporate all of the functional mapping efforts into a coordinated system, tied to a common base. These layers will provide systematic input to information systems as well as a format for displaying the output.

Utilizing the terrain data and resource data, it is proposed to prepare several management bases on an adequate scale and format for approximately 12 National Forests:

		1973	1974	1975
Resource inventory (primary series)	1:24,000 scale quadrangles	708	590	708
General management (secondary series) Regional series	Forests	12	10	12

The funds for fiscal year 1975 will be used to produce the appropriate map information and develop new geometronic process and display techniques.

(5) Maintenance of improvements for fire and general purposes (including communications) ($9,385,000, an increase of $349,000 for space rental and $64,000 for increased pay costs.)

This program provides for maintenance and for minor betterment, minor construction or replacement of buildings, utilities, pollution abatement facilities, airfields, communications systems and related structures throughout the National Forests and National Grasslands. The value of existing improvements exceeds $300 million. These facilities are essential to the achievement of activity functions of the Forest Service including the protection, management and development of National Forest lands for minerals and recreation use, forage, timber and water protection, and for enhancement of fish and wildlife habitat.

It is essential that the physical plant, upon which all Forest Service programs depend, be brought up to acceptable standards and be maintained at that level. These funds will be used toward maintaining the following:

Type of facility	
Fire lookouts, towers, and observatories	1,500
Dwellings, cabins, barracks, and trailers	5,400
Field offices	800
Storage and service buildings	7,000
Water and sewer systems	5,000
Radio units	22,100
Landing fields and heliports	500
Miles of telephone lines	7,500
Miles of administrative fences	1,200

Maintenance funds are proportionately distributed to field units based upon number of improvements by classes currently justified by program use and an analysis of unit maintenance cost.

(6) Special uses--non-recreation ($3,784,000, an increase of $136,000 for space rental and $33,000 for increased pay costs.)

Occupancy and use permits, easements and memoranda of understanding authorized 48,950 special land uses on 5.8 million acres of the National Forests in 1973. There is a constant turnover of these authorized uses of about 5 percent each year. The number of new permits issued has increased about 3 percent each year. It is estimated in fiscal year 1975 that the number will increase to around 52,600, covering a total of 6.2 million acres.

Users include public and private enterprise representing individuals, corporations and city, county, State and Federal government agencies. The special land uses are grouped in eight broad categories consisting of about 60 kinds of use excluding recreation. They are:

(1) Agriculture.
(2) Community improvement.
(3) Industrial.
(4) Public information.
(5) Research, study, and training.
(6) Transportation.
(7) Utilities and communications.
(8) Water.

Areas of particular interest are antiquities, electronic installations, fences, pastures, powerlines, reservoirs, roads, telephone lines, and water transmission facilities.

Special land uses assist economic development of rural areas by making suitable land available to farmers, ranchers, and local communities. The Federal Government is the major landowner in many localities. Denial of the use of National Forest System land would create hardships on the local communities, deter further business development, and materially affect on-going Federal programs in rural areas.

More than 25,000 new applications, applications for amendment, applications for transfer, and inquiries are received annually from individuals, companies, corporations, and city, county, and State governments, as well as Federal agencies, to fill their needs. Of this total number, approximately 6,500 are new applications.

Based on past experience, less than a third of the new applications can be approved as being compatible with resource and environmental factors and the needs of the general public. Each new application requires an impact survey, multiple use report or comparison with multiple use plan. New applications of major impact also require preparation of an environmental statement prior to approval. Investigations identify conflicts with management plans and existing uses. Recommendations attempt to assure conformance with multiple use and individual resource plans and programs and actions to protect the quality of the environment. A permitted use must be activated with improvements designed and installed or constructed in compliance with all existing laws, regulations, and local codes under a carefully drawn special-use document embodying all recommended protection measures. Of particular importance are the National Environmental Policy Act of 1969 (PL 91-190), the Federal Water Pollution Control Act amendments of 1972 (PL 92-500), and Executive Order 11507.

After permits are issued, periodic compliance inspections are made to determine whether the authorized conditions, responsibilities, and duties are met according to acceptable standards.

These standards are those which:

(1) Maintain acceptable levels of water and air quality.
(2) Protect the natural resources from excessive soil erosion.
(3) Prevent unnecessary damage to natural beauty and esthetics of the environment.
(4) Protect renewable resources such as timber, forage, and wildlife from careless or wanton damage.
(5) Do not unnecessarily increase fire hazard.
(6) Protect the public and other users from physical hazards.
(7) Maintain fees or rentals equal to the value of the use authorized comparable with fair market value.

Of the total funds available, about $75,000 would be used to develop and maintain information on National Forest archaeological sites and to protect such sites and artifacts from vandalism or other damage by unauthorized persons, including, if necessary, excavation of endangered sites on an emergency basis.

Under special authorities more than half of all permitted uses are allowed without charge. The remainder pay fees for the privilege of occupying National Forest land. Fiscal year 1973 receipts from special land uses were $1,080,903. In addition to the actual receipts collected by the Forest Service, about $2.7 million of assistance, through free permits, should be recognized. The total direct monetary value of receipts and benefits is over $4 million. However, many of these free permits no longer qualify, and they are being converted to charge permits. There will be a proportionate increase in receipts to the Treasury.

(7) Payments to Employees' Compensation Fund ($2,860,000, an increase of $560,000)

These funds will be used to reimburse the Employees' Compensation Fund, Department of Labor, in accordance with PL 86-767 (5 USC 785), which was enacted September 13, 1960, for benefit payments made from that fund to employees of the Forest Service who are injured while in the performance of duty. The 1974 payment was $2,325,563.

(8) Bicentennial and Forestry Centennial ($20,000)

The Nation's Bicentennial in 1976 also is the Centennial of Federal forestry in the United States. America's vast forests have played a basic role during the past 200 years in this country's development of the highest standard of living for the most people of any Nation in history. Funds requested will be used to revise and publish the booklet, "Highlights in the History of Forest Conservation," as a special National Bicentennial and Forestry Centennial edition.

Project (9)

FIGHTING FOREST FIRES

1973	$43,838,000
1974	4,275,000
1975	4,275,000

No increase is proposed.

This program provides an initial amount for suppressing forest fires on or threatening National Forests and Grasslands which cannot be handled by the regular forest fire protection program. This initial appropriation is supplemented each year to the extent necessary to cover all emergency forest firefighting costs.

Included are expenditures for men and equipment to control large fires. In addition, when critical conditions present an unusual threat, men are engaged in special efforts to prevent fires and temporary forces are used at strategic locations to be available to attack fast-spreading fires.

The volume and scope of emergency forest firefighting varies annually according to severity of burning conditions and the extent of the forest fire protection program. This program and the forest fire protection program are directly related. The cost of fire protection on the National Forests and Grasslands is the sum of the two programs.

Calendar Year 1973 Fire Season

The most severe and widespread drought conditions in 39 years occurred in Washington, Oregon, Idaho, Montana, and Northern California. Fire season in Arizona and New Mexico, which normally decreases after early July rains, continued severe through October. No precipitation, continued high temperatures, and wind caused all fires to spread rapidly.

Through December 31, 1973, 12,335 fires burned 178,353 acres. This is a 1 percent increase in the number of fires and a 20 percent decrease in acres burned based on the past 5-year average. Of the total fires, 5,941 were man-caused fires. This is a 2 percent increase over the five-year average.

From August 8 to 24, 1973 there were over 2000 fires caused by either man or lightning; 25 of these fires became large due primarily to the extreme burning conditions. During one 24-hour period lightning set over 400 fires. Although initial attack forces had been increased, capabilities for suppression were over-taxed.

Geographic Breakdown of Obligations--Fiscal Year 1973

Alabama	$32,544	Kentucky	26,131	Oregon	9,963,017
Alaska	18,068	Louisiana	56,799	Pennsylvania	2,316
Arizona	4,504,713	Michigan	50,546	South Carolina	47,637
Arkansas	100,210	Minnesota	165,901	South Dakota	185,546
California	23,205,733	Mississippi	73,927	Tennessee	72,792
Colorado	443,403	Missouri	101,889	Texas	19,063
District of Columbia	359	Montana	2,816,503	Utah	1,562,559
		Nebraska	30,292	Vermont	371
Florida	206,175	Nevada	858,496	Virginia	55,233
Georgia	20,063	New Mexico	2,451,239	Washington	4,364,952
Idaho	5,630,761	North Carolina	95,251	West Virginia	4,300
Illinois	6,768	North Dakota	142	Wisconsin	7,696
Indiana	1,593	Oklahoma	7,185	Wyoming	351,397
				Total	57,541,570

The amounts for 1974 and 1975 have not been distributed by States. Locations of emergency firefighting funds cannot be forecast with any degree of accuracy.

Project (10)

FOREST INSECT AND DISEASE CONTROL

1973	$10,696,000
1974	11,219,000
1975	11,276,000
Increase	+57,000

A net increase of $57,000 is proposed as follows:

(1) An increase of $62,000 to provide for the full year costs of the pay increase effective in fiscal year 1974.

(2) An increase of $245,000 to provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313.

(3) **A decrease of $250,000 will be absorbed through a shift in program priorities. In order to maintain at least the same program level for gypsy moth control made possible by a $250,000 supplemental appropriation in 1974, it is proposed to reduce methods improvements efforts.**

The forest pest control program involves protection of the forest from depredation by insects and diseases on lands of all ownerships. Activities include:

(1) The prevention, detection, evaluation, and suppression of pests on all Federal lands.

(2) Coordination of the program on lands of all ownerships.

(3) Federal financial assistance to States for a similar program on State and private lands.

The program for fiscal year 1975 will include a strong effort to hold losses caused by bark beetles to tolerable levels. It fs not possible to predict this far in advance the exact locale or scope of control operations, but present beetle activity indicates a need for:

(1) Mountain pine beetle control projects in Colorado, Montana, South Dakota, Wyoming, and Washington.

(2) Douglas-fir beetle, fir engravers, and western pine beetle control projects in California, Oregon, and Washington.

(3) Spruce beetle control projects in Alaska, Arizona, Colorado, New Mexico, Oregon, and Washington.

(4) Southern pine beetle control projects in Alabama, Arkansas, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Texas, and Virginia.

Defoliating insects--such as the gypsy moth, spruce budworm, Jack pine budworm, tussock moth, and sawflies--will be controlled where resource values are seriously threatened by them and benefit-cost ratios are favorable. With firm data not available as yet, it is expected that suppression projects may be required to control:

(1) Gypsy moth in New Jersey, New York, Pennsylvania, and Rhode Island.

(2) Spruce budworm in Maine, Minnesota, and Montana.

(3) Jack pine budworm in Michigan and Wisconsin.

(4) Tussock moth in Oregon, Washington, Idaho, and Montana.

(5) Sawflies in Michigan, Minnesota, and Wisconsin.

(6) Cankerworms and leaf tiers in New Jersey, New York, and Pennsylvania.

Every effort is being made to strengthen procedures for making detection surveys and biological evaluations. The future goal is to cut detection time in half and to obtain more precise figures concerning the status of specific pests. By decreasing the time during which pests go undetected and better predicting the course they might follow, suppression costs can be lowered and destructive losses to the Nation's timber supply reduced.

The costs have greatly increased since the implementation of the National Environmental Policy Act. Not only have additional monies been required to prepare and review environmental statements, but restrictions on pesticides have seriously affected the capability to deal with major outbreaks of forest pests. Several pesticide registrations have been canceled leaving no effective method for reducing destructive losses occurring to the Nation's timber supply. When less persistent chemicals have been available as substitutes, a larger effort has been required to monitor outbreaks for proper timing of application. **Much of the effort is devoted to screening and testing of alternate chemicals and other means of managing pest populations.**

Efforts will be continued on control of the dwarf mistletoes in the Western regions in 1975 on a project basis. These parasitic plants are responsible for reductions of tree growth amounting to estimated losses of $40 million annually in lumber production from western conifers. Integrating control into planned silvicultural work provides a high rate of return (10-15 percent) by eliminating losses caused by dwarf mistletoe.

White pine blister rust control will be continued in the East, the Lake States, and in selected stands in California. The program in the East is primarily a cooperative one, financed by the States with Federal financial assistance. Careful evaluation of rust conditions and hazard has reduced the area requiring control materially in recent years.

Pest outbreaks fluctuate greatly. The cost to check and contain outbreaks cannot be accurately predicted. Using past experience as a guide, along with the knowledge of developing situations, Federal fund needs for fiscal year 1975, as compared with 1973 and 1974, are as follows:

Item	1973	1974	1975	Change		
				Pay Costs	GSA Space	Program
			(In thousands)			
Technical assistance, training, detection, and evaluation ..	$6,067	$6,396	$6,387	$35	$137	-$181
Methods improvement	903	645	162	-4	2	-481
Bark beetle control	1,992	2,267	2,024	14	37	-294
Defoliator control	2,089	1,058	1,815	13	50	694
Other insect control	129	123	134	1	2	8
Blister rust control	644	445	448	2	10	-9
Oak wilt control	59	56	59	- -	1	2
Dwarf mistletoe	186	206	220 2/	1	5	8
Other disease control	27	23	27	- -	1	3
Total 1/	12,096	11,219	11,276	62	245	-250

1/ Includes $1.4 million travel reduction savings in other forest land management funds that were used for insect and disease control work.

2/ For approved suppression projects.

Pest control scientists help to protect the environment by carefully weighing and determining the adverse effects of unchecked pest outbreaks and those which might result from prescribed control treatments with the benefits to be derived. As part of their overall responsibilities, pest control scientists will keep all

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environmental impacts, both beneficial and adverse, in proper perspective and recommend those courses of action that will provide the greatest benefits.

Examples of Recent Accomplishments

Cooperative gypsy moth suppression. Cooperative projects in New York, New Jersey, Pennsylvania, and Rhode Island provided for treatment of some 200,000 acres infested with gypsy moth. Treatments were successful in protection of current year's foliage. Significance of any long-term benefits must await further evaluation.

Cooperation with States. Last year was the first full year of operations under the new Pest Management Action Program. Participation is up 23 percent with 32 States now involved. Fiscal year 1973 was the first complete year of suppression project cost-sharing at 50 percent rather than the 33-1/3 percent of previous years. Together, these two programs have led to an increase of over 2.5 million Federal dollars moving directly into the State forest pest management program.

Seedling resistance to fusiform rust. A system was developed for testing and evaluating large volumes of loblolly and slash pine tree seed for resistance to fusiform rust. Implementation of the system on an operational basis is now underway. This will facilitate the identification of resistant parents whose seed can be used for regeneration purposes in rust hazard areas; hence, reducing future losses from this disease.

Spruce budworm attacked in Maine. Some three million acres of spruce-fir type in Maine were infested by spruce budworm. Maine, in a cooperative suppression project with the Forest Service, used Zectran to treat 470,000 acres where high damage was imminent if the infestation were allowed to go unchecked. The overall reduction in budworm population in the treated area was about 93 percent.

Bark beetles. Suppression of various bark beetle outbreaks involved treatment of numerous individual spot infestations in the West and South. The massive southern pine beetle epidemic now underway is being vigorously attacked on many fronts. Hopefully, these efforts will result in population declines next year. Although direct chemical treatment was necessary in some places, greater advantage, than in any previous year, was taken to utilize logging as a means of removing infested trees from the woods before beetle emergence. Last year 172 million board feet and 481 thousand cords of dead and dying trees were removed from forests in the South.

Project (10)

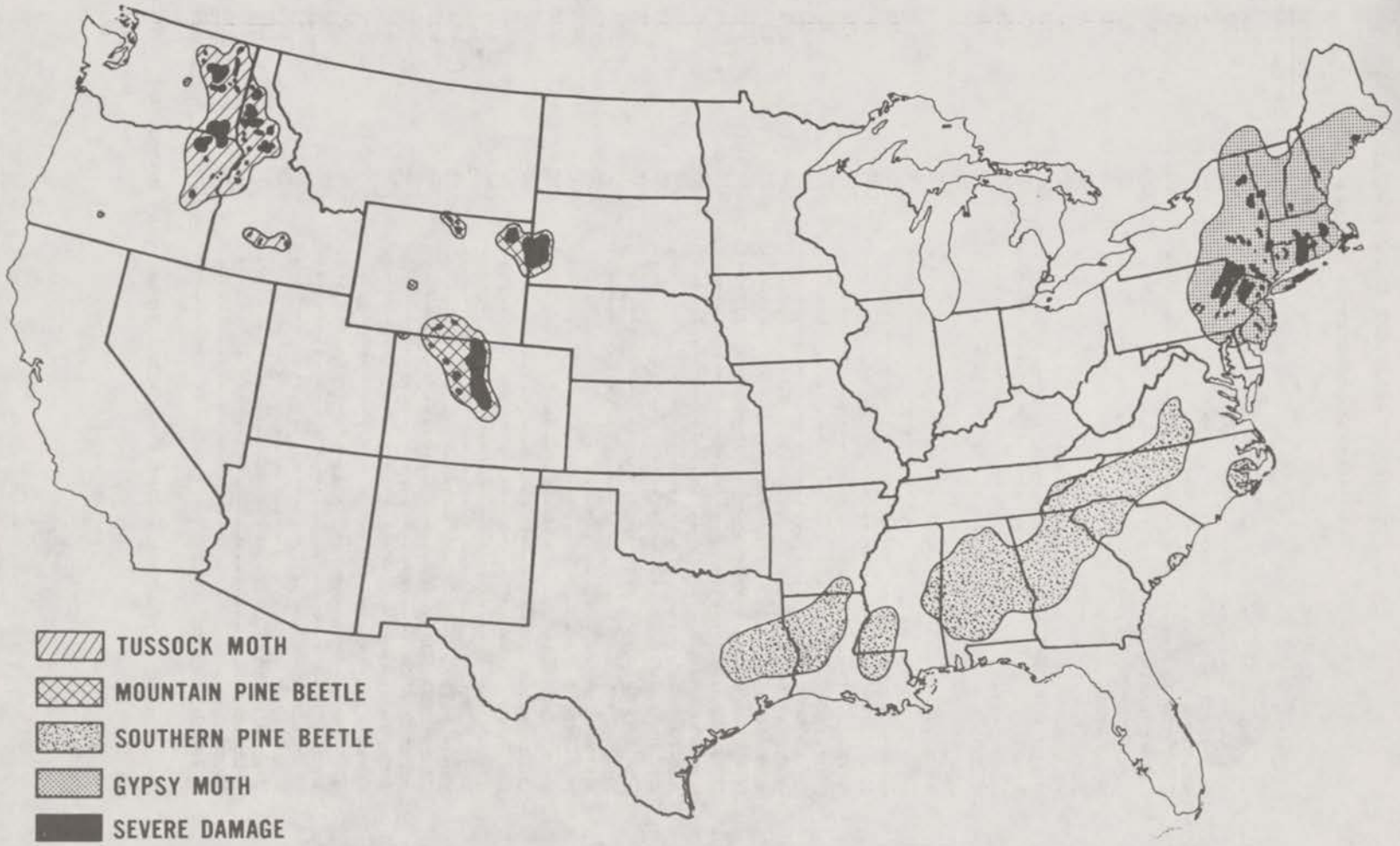
GEOGRAPHIC BREAKDOWN OF APPROPRIATION

Insect and Disease Control

	1973 1/	1974 estimate	1975 estimate
		(in thousands)	
Alabama	$437	$386	$438
Alaska	108	110	104
Arizona	160	162	167
Arkansas	114	105	78
California	1,000	1,015	1,043
Colorado	350	355	365
Connecticut	20	20	21
Delaware	6	6	6
District of Columbia	180	184	188
Florida	43	44	45
Georgia	380	132	167
Hawaii	20	20	21
Idaho	740	750	771
Illinois	8	8	8
Indiana	8	8	8
Iowa	7	7	7
Kansas	6	6	6
Kentucky	55	56	57
Louisiana	500	456	460
Maine	749	608	625
Maryland	160	162	136
Massachusetts	20	20	21
Michigan	160	162	136
Minnesota	115	117	120
Mississippi	180	132	136
Missouri	100	101	94
Montana	753	764	761
Nebraska	8	8	8
Nevada	30	30	31
New Hampshire	110	112	104
New Jersey	313	236	209
New Mexico	250	254	261
New York	840	688	521
North Carolina	325	299	297
Ohio	60	61	57
Oklahoma	7	7	7
Oregon	640	649	667
Pennsylvania	353	364	313
Rhode Island	170	54	136
South Carolina	149	126	129
South Dakota	300	304	313
Tennessee	157	159	156
Texas	270	223	261
Utah	65	66	68
Vermont	90	91	78
Virginia	530	527	542
Washington	420	426	438
West Virginia	150	152	191
Wisconsin	190	193	198
Wyoming	290	294	302
Total program level	12,096	11,219	11,276

1/ Includes funds transferred from other Forest land management accounts.

AREAS INFESTED BY THE GYPSY MOTH, SOUTHERN PINE BEETLE, MOUNTAIN PINE BEETLE, AND DOUGLAS FIR TUSSOCK MOTH*



*SOUTHERN PINE BEETLE DAMAGE IS CONCENTRATED IN MANY SPOTS SCATTERED WIDELY THROUGHOUT THE AREA OF INFESTATION.

Figure 10

COOPERATIVE LAW ENFORCEMENT

1973	$2,527,000
1974	2,582,000
1975	1,624,000
Decrease	-958,000

A decrease of $958,000 in budget authority is proposed. On the basis of program level, there will be an increase of $290,000 over the 1974 level of $3,462,000.

This includes $8,000 for annualization of the pay cost increase effective in fiscal year 1974 and $41,000 for General Services Administration space rental cost.

Fiscal year 1975 funds, compared with 1973 and 1974, follow:

	FY 1973	FY 1974 estimate	FY 1975 estimate	Increase or decrease
		(in thousands)		
Program level	$1,935	$3,462	$3,752	$290
Unobligated balance brought forward	-2,416	-3,008	-2,128	880
Unobligated balance carried forward	3,008	2,128	- -	-2,128
Appropriation (budget authority)	2,527	2,582	1,624	-958

Public Law 92-82 (August 10, 1971) authorized the Secretary of Agriculture to cooperate with any State or political subdivision thereof in the enforcement of State or local laws on lands of the National Forest System. Such cooperation includes reimbursement to a State or its subdivision for expenditures incurred in connection with activities on National Forest System lands.

State and local laws and ordinances are applicable on National Forest System lands with few exceptions. The Forest Service must look to State and local law enforcement officials to enforce these laws and ordinances on the National Forests. State and local law enforcement agencies will continue to perform, on a nonreimbursable basis, their normal law enforcement duties without cost to the Federal Government. This program provides for the negotiation of law enforcement agreements between the local law enforcement agencies and the Forest Service to handle abnormal impacts caused by public use of the National Forest.

As of November 1973, there were 274 agreements in operation. It is expected that this number will increase to 325-350 in fiscal year 1975. 400 counties in 40 States are eligible to participate in this program.

The cooperating agencies processed 3,474 criminal cases for violation of State or local laws on National Forests during calendar year 1972.

It is proposed that at least a level program be maintained as these small cooperating agencies generally must increase their staff and invest in added equipment to provide service under the agreement. They need a commitment that there will be reasonable continuity in program financing from year to year.

Project (11)

GEOGRAPHIC BREAKDOWN OF PROGRAM LEVEL

Cooperative Law Enforcement

	FY 1973 actual	FY 1974 estimate	FY 1975 estimate
		(in thousands)	
Alabama	$13	$16	$17
Alaska	- -	49	52
Arizona	68	113	121
Arkansas	25	43	46
California	498	715	775
Colorado	15	120	130
District of Columbia	46	44	47
Florida	26	37	40
Georgia	8	23	25
Idaho	68	270	295
Illinois	15	18	19
Indiana	9	11	12
Kentucky	36	16	17
Louisiana	10	17	18
Michigan	43	41	44
Minnesota	30	32	34
Mississippi	13	23	25
Missouri	43	73	78
Montana	78	265	290
Nebraska	- -	2	2
Nevada	25	59	63
New Hampshire	44	57	61
New Mexico	63	110	120
New York	9	11	12
North Carolina	17	37	40
North Dakota	- -	25	28
Ohio	9	11	12
Oklahoma	1	3	3
Oregon	238	350	380
Pennsylvania	31	27	28
South Carolina	8	17	18
South Dakota	11	87	95
Tennessee	28	30	32
Texas	9	16	17
Utah	128	270	295
Vermont	27	33	35
Virginia	13	44	47
Washington	185	275	300
West Virginia	1	10	11
Wisconsin	16	12	13
Wyoming	28	50	55
Total	1,935	3,462	3,752

Projects (12) - (21)

GEOGRAPHIC BREAKDOWN OF APPROPRIATION

Forest Research

State	Headquarters or Project Location	FY 1974 estimate	FY 1975 estimate	Change
		(in thousands)		
Alabama	Auburn	$400	$414	$14
	Tuskegee	27	28	1
Alaska	Fairbanks	505	421	-84
	Juneau	677	604	-73
Arizona	Flagstaff	840	871	31
	Tempe	925	960	35
	Tucson	278	287	9
Arkansas	Fayetteville	267	277	10
California	Arcata	270	281	11
	Berkeley	2,704	2,769	65
	Fresno	377	341	-36
	Redding	162	169	7
	Riverside	2,700	2,764	64
Colorado	Fort Collins	1,950	2,025	75
Connecticut	Hamden	1,111	1,169	58
District of Columbia	Washington	484	502	18
Florida	Lehigh Acres	161	168	7
	Marianna	201	208	7
	Olustee	689	718	29
Georgia	Athens (including Atlanta)	1,659	1,723	64
	Macon	1,259	1,297	38
Hawaii	Honolulu	426	441	15
Idaho	Boise	436	451	15
	Moscow	1,194	1,235	41
Illinois	Carbondale	902	806	-96
Kentucky	Berea	406	369	-37
Louisiana	Pineville	2,066	2,139	73
	New Orleans	949	990	41
Maine	Orono	324	281	-43
Maryland	Beltsville	302	314	12
Massachusetts	Amherst	361	374	13
Michigan	East Lansing (including Cadillac)	612	634	22
	Houghton	437	450	13
	Marquette	270	281	11
Minnesota	Duluth	315	323	8
	Grand Rapids	358	373	15
	St. Paul	1,374	1,334	-40
Mississippi	Gulfport	1,522	1,593	71
	Oxford	314	325	11
	State College	217	225	8
	Stoneville	925	856	-69

Projects (12) - (21)

GEOGRAPHIC BREAKDOWN OF APPROPRIATION

Forest Research -- continued

State	Headquarters or Project Location	FY 1974 estimate	FY 1975 estimate	Change
		(in thousands)		
Missouri	Columbia	$281	$292	$11
Montana	Bozeman	643	658	15
	Missoula	3,193	3,285	92
Nebraska	Lincoln	244	255	11
Nevada	Reno	471	163	-308
New Hampshire	Durham	942	875	-67
New Jersey	Pennington	394	410	16
New Mexico	Albuquerque	353	360	7
New York	Syracuse	88	92	4
North Carolina	Asheville	948	989	41
	Franklin	262	272	10
	Research Triangle (Raleigh-Durham)	834	872	38
North Dakota	Bottineau	241	251	10
Ohio	Delaware (including Columbus)	1,464	1,525	61
Oregon	Bend	308	316	8
	Corvallis	2,768	2,695	-73
	LaGrande	551	511	-40
	Portland	1,616	1,677	61
Pennsylvania	Upper Darby	599	625	26
	Warren	375	390	15
Puerto Rico	Rio Piedras	278	288	10
South Carolina	Charleston	291	302	11
South Dakota	Rapid City	341	354	13
Tennessee	Sewanee	213	221	8
Texas	Nacogdoches	307	319	12
Utah	Logan	778	802	24
	Ogden	550	576	26
	Provo	385	403	18
Vermont	Burlington	476	494	18
Virginia	Blacksburg	90	93	3
Washington	Olympia	477	391	-86
	Seattle	731	701	-30
	Wenatchee	334	347	13
West Virginia	Morgantown	347	359	12
	Parsons	363	377	14
	Princeton	1,157	1,191	34
Wisconsin	LaCrosse	118	122	4
	Madison	7,530	7,685	155
	Rhinelander	721	749	28
Wyoming	Laramie	398	408	10
Total		63,816	64,485	669

Project (12)

TREES AND TIMBER MANAGEMENT RESEARCH

1973	$12,838,000
1974	13,118,000
1975	13,602,000
Increase	+484,000

An increase of $484,000 is proposed as follows:

(1) To provide for the full year costs of the pay increase effective in fiscal year 1974, $127,000.

(2) To provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313, $357,000.

Timber management research develops scientific knowledge of forest ecosystems with trees as a principal component and develops methods for culture of trees and management of forests for production of timber and for modification and improvement of man's environment. This includes:

(1) Development of cultural methods for timber and timber-related crops.

(2) Techniques of timber measurement.

(3) Techniques of forest management planning.

(4) Techniques for environmental tree culture.

(5) Research in forest genetics.

The core of this research is determining the proper culture for over a hundred different commercial timber species based on a thorough knowledge of their ecology and growth requirements. This research determines how the Nation's needs for timber and other forest benefits can be met on Federal, State, and private lands through measures such as brush control, forest establishment, protection from animals, stand culture, soil and site improvement, and reestablishment of tree species valuable for timber or environmental purposes.

Research is being accelerated on intensive culture of important timber types to help meet the Nation's growing needs for domestic forest products.

Timber management research also provides forest managers with reliable information on growth and yield of forests and on the influence of cultural practices on yield and quality of the stand.

This program includes research on methods of producing timber-related forest crops such as gum naval stores, maple sap, Christmas trees, and other income-producing natural products from forests.

Forest genetics research includes scientific study of variation and inheritance in trees and development of techniques for producing strains or hybrids which are superior in growth rate, wood quality, resistance to insects, diseases, and other damaging factors, or special value for use in environmental improvement.

Examples of Recent Accomplishments

Silviculture handbook summarizes options for all major forest types in the United States. In response to the surge of national interest in forest management, a handbook has been prepared synthesizing research information regarding biologically feasible systems of forest culture for harvesting, renewing, and maintaining 37 major forest types in the Nation. The handbook, entitled "Silvicultural Systems for the Major Forest Types of the United States," presents systems appropriate for intensive timber production as well as systems for combining timber production with other forest uses. The book also describes limitations in the use of certain

systems imposed by species requirements, natural hazards, and the makeup of existing stands. It should help dispel controversies about silvicultural options and their consequences in the major forest types of the United States. The handbook is the product of continuing research in a series of silvicultural projects that have responsibility for developing and improving the cultural options for multiple use management of the major timber types of the United States.

Genetically improved trees are increasing timber supplies. Past efforts to increase the Nation's timber supplies by intensive management of plantations were seriously hampered by the lack of fast-growing and disease-resistant planting stock. Genetics research in the South has made rapid progress in developing high yielding disease-resistant pine strains and fast-growing commercial hardwood species. Improved strains of both southern pines and cottonwood which will outproduce unimproved strains by 20 to 40 percent are now becoming available for certain areas and are being distributed to nurseries for mass production. In the Pacific Northwest, genetic selection research has led to an improvement in rate of seedling height growth of Douglas-fir and an increase in rate of volume growth compared to unselected seedlings. Even greater gains are expected when second generation genetically improved Douglas-fir planting stock becomes available in the future.

Monograph on true firs covers taxonomy and distribution of these species. Although true firs are among the most important coniferous trees in the world, their taxonomy has long been in a state of confusion because of their great variability. The botanical relationships among the 39 species and 23 varieties have now been clarified in a comprehensive investigation conducted by members of the staff of the National Taiwan University in cooperation with the U. S. Forest Service. Results of this research are given in a fully illustrated monograph which provides detailed descriptions.

Tree scientists the world over will find this book of immediate use in the identification of the true firs, in hybridization studies, and in selecting the proper species to be planted for forest production and other uses.

Book (420 pages) describes research natural areas in Oregon and Washington. A guide to the use of Research Natural Areas (areas of essentially virgin vegetation) on Federal lands in Oregon and Washington has been compiled to facilitate scientific study. The guide describes the physical and biological features of the tracts reserved for this purpose.

Summaries for each area include a brief ecological description at the time of establishment. The book will be a key reference for scientists and educators who study the biota and ecological processes of selected natural environments. The Forest Service now has a system of 113 Research Natural Areas totaling 123,681 acres.

Guides established for increasing yields from upland oak forests. Long-term studies in thinned stands of upland oaks in the Central States have provided growth and yield estimates for a wide range of stand conditions, ages, site qualities, and stand densities.

Stands in which density was regulated produced one-third to one-fourth more timber than fully stocked stands that were not managed. This information will considerably improve the accuracy of estimates of allowable cut on managed forest properties.

Small openings improve wildlife habitat in northern hardwoods. Dense stands of northern hardwoods do not produce much food and cover for wildlife, particularly game animals. Research has shown how small openings throughout these stands will provide an abundance and variety of herbs, grasses, and shrubs that supply vital nutrition for game animals and desirable nesting and brood-rearing sites for game birds. Careful location of openings in areas of poor tree growth, such as on shallow soils, in frost pockets, and in areas of poor or excessive drainage, can prolong their value for wildlife by delaying return of tree cover.

Project (13)

FOREST WATERSHED MANAGEMENT RESEARCH

1973	$6,726,000
1974	7,710,000
1975	7,716,000
Increase	+6,000

A net increase of $6,000 is proposed as follows:

(1) Increase of $79,000 to provide for the full year costs of the pay increase effective in fiscal year 1974.

(2) Increase of $177,000 to provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313.

(3) Decrease of $250,000 is based on the discontinuation of research for which funding was increased in fiscal year 1974.

Watershed management research is conducted to:

(1) Develop methods and techniques for managing forest and forest-related watersheds to protect and improve soil and water quality, improve the yield and timing of water flows, and restore and rehabilitate degraded landscapes.

(2) Develop adequate means of protecting soil and water resources, especially on fragile or unstable soils, while forest and forest-related lands are being managed for other products and services.

(3) Provide basic knowledge of vegetation, soil, water, and atmospheric relationships in wildland and related forest areas.

Examples of Recent Accomplishments

Initiating research in the Surface Environment and Mining Program (SEAM). SEAM is a research, development and applications program designed to help meet the Nation's energy crisis and produce needed minerals in harmony with a quality environment and other natural resource values. Plans are complete for initiating studies to:

(1) Determine and evaluate the environmental impacts of mining and related activities in the western United States.

(2) Develop alternative engineering-reclamation systems to prevent or reduce future environmental damage.

(3) Develop alternative land treatments designed to return or transform disturbed areas to beneficial use.

These studies are scheduled to take place in the Interior West, including Wyoming, Montana, the Dakotas, New Mexico, Utah, and other States.

Properly controlled applications of forest chemicals will not significantly impact stream organisms. Insecticides, herbicides, and fertilizers are important chemical tools in the intensive management of forests. Research shows that overland flow and leaching do not contribute significant quantities of these chemicals to forest streams. Unintentional direct application to surface waters is the principal means of entry of chemicals to forest streams. Therefore, stream organisms can be protected from heavy exposure to chemicals by using extreme caution in necessary application of chemicals to the forest.

Project (13)

Surface mining may cause chemical pollution of streams in areas where acid is no problem. A four-year study of the chemical quality of water in watersheds in Kentucky showed that some rocks when exposed to weathering and erosion following mining caused water pollution. Increased concentrations of sulfate, calcium, and magnesium were noted in water samples taken from recently mined watersheds. Information on the amounts and kinds of chemicals added to streams will be useful for developing methods to control chemical pollution of streams.

Fertilizers increase black locust growth on acid surface-mine spoils. Black locust is commonly planted to control erosion on acid surface-mine spoils. Seedlings survive, but height growth is often quite slow, thereby reducing the development of effective tree cover for soil-site protection. Research showed that black locust on acid surface-mine sites should be fertilized with nitrogen and phosphorous to achieve rapid site protection.

Erosion from construction and grooming of ski slopes can be minimized. It is desirable to revegetate promptly forest areas cleared for use as ski runs to prevent erosion and to restore the balance of soil-plant nutrient cycles. Studies conducted near Wenatchee, Washington, revealed that low soil fertility was one factor limiting success of revegetation. Also, covering the seed fertilizer was at least as important as the choice of species for revegetation. Methods developed in these studies will serve as guides to successful revegetation of ski slopes in other places.

New methods to establish vegetative cover on western surface-mined lands provide rapid cover. Tests on coal spoil banks in Montana and on cobalt and phosphate surface-mined areas in Idaho, show that native and introduced species can provide rapid vegetative cover for disturbed sites. The key to this success was chemical analysis of the spoil material followed by application of counteractive soil amendments and planting of tolerant plant species.

Project (14)

WILDLIFE, RANGE, AND FISH HABITAT RESEARCH

1973	$4,656,000
1974	4,482,000
1975	3,860,000
Decrease	-622,000

A net decrease of $622,000 is proposed as follows:

(1) Increase of $37,000 to provide for the full year costs of the pay increase effective in fiscal year 1974.

(2) Increase of $116,000 to provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313.

(3) Decrease of $775,000 is based on the discontinuation of research for which funding was increased in fiscal year 1974.

The Nation's forests, ranges, and associated waters provide a home for millions of livestock, game animals, and countless numbers of other forms of fish and wildlife. These populations provide recreation, food, fiber, and income for a broad spectrum of the Nation's population. Mammals, birds, and fish vary widely in social and ecological requirements, but the basic ecological processes are common to all species; all are products of the habitat.

Land management decisions must be made with full knowledge of the probable impact upon habitat productivity. Where competitive uses exist and where habitat values are low, more effective management systems are essential for rapid improvement in the years ahead.

Project (14)

Wildlife, range, and fish habitat research is conducted to maintain and increase the diversity and productivity of fish and wildlife, as well as domestic livestock populations by:

(1) Defining the habitat requirements of the many species of fish, wildlife, and livestock.

(2) Assessing the impact of alternative land-use practices upon habitat values.

(3) Generating strategies to optimize the habitat values of forests and ranges.

Examples of Recent Accomplishments

Chemical control of sagebrush in Wyoming does not disrupt the normal behavior and activities of elk at calving time. Sagebrush control, an accepted range improvement practice, has been successfully applied to several million acres of western rangeland. Since, in some areas, elk calve on sagebrush ranges, it was essential to know if the practice was compatible with maintenance of habitat quality for elk at calving time. A 3-year research study indicates that sagebrush control has little or no effect on elk calving behavior and feeding habits.

Wildlife can enhance the quality of urban environments. Researchers at Amherst, Massachusetts, have formed guidelines for a staged program of urban landscape development that provides the essential elements of wildlife habitat--food, water, cover, and nesting areas--while also meeting the other esthetic goals of landscaping. The guides provide a management plan for the homeowner, including how, what, and when to plant.

Principles for managing livestock on rangeland are established. Numerous research studies have defined the proportion of range forage that can be utilized without depleting the soil or vegetation. In a wide array of ecological conditions, research has shown the season when forage can be utilized with the least impact upon the plants. Grazing systems have been developed in a spectrum of ecological regions that integrate intensity and season-of-use to give optimum economic return and sustained yield.

Precommercial thinning of direct-seeded slash pine stands increases the yield of understory vegetation. Direct-seeded southern pines may result in stands so dense the production of usable wood is reduced. Forage production is also diminished, especially if prescribed burning is curtailed. Research in Louisiana shows that precommercial thinning is a practice that complements both wood and forage production.

Project (15)

FOREST RECREATION RESEARCH

1973	$1,374,000
1974	1,326,000
1975	1,222,000
Decrease	-104,000

A net decrease of $104,000 is proposed as follows:

(1) An increase of $12,000 to provide for the full year costs of the pay increase effective in fiscal year 1974.

(2) An increase of $34,000 to provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313.

(3) A decrease of $150,000 is based on the discontinuation of research for which funding was increased in fiscal year 1974.

Growing public demands for forest-based recreation opportunities has generated new needs for both public and private developments, new forest management requirements, new conflicts among users and resource managers, and new threats to both the quality of recreational experiences and the health of the natural resource base. Conflicts and environmental impacts faced by today's resource managers were quite rare only 25 years ago.

Forest recreation research is being conducted to:

(1) Develop new and better resource management practices which enhance amenity values.

(2) Understand man's need for, and use of, forests, open space, and parks as environments for living, working, and recreation.

(3) Analyze and understand the interactions between people and forests, social and economic factors underlying outdoor leisure activities, esthetic quality of forest landscapes and environmental situations, trends in recreation uses, use and management of wilderness areas, and alternative management strategies for meeting the public demands.

(4) Identify interrelations among recreation, environmental amenities, and other uses of forests and open spaces--and find better ways of coordinating these uses.

The program includes research on planning and management of forest-based recreation opportunities, landscape scenery, preservation and use of wilderness resources, and the interactions between man and his forest environment.

Examples of Recent Accomplishments

Modern techniques have been adapted to help plan management of wilderness areas. Visits to wilderness and primitive areas have increased at about 10 percent per year for the past 25 years. With over 5 million visitor-days of use annually, some parts of the wilderness are crowded and, in some areas, the environment is threatened by overuse. Other areas are relatively untouched. Wilderness managers face a very difficult task in planning and managing to preserve the wilderness and to provide a quality wilderness experience for visitors.

A new system for analyzing wilderness management problems, and for strengthening the manager's hand in planning, has been developed. This is a simulation model of wilderness travel behavior. It is based on the results of prior Forest Service research on the preferences, choices, and behavior of wilderness visitors plus modern mathematical modelling methods. With this new tool, managers can test in advance and predict the practical effects of alternative management decisions and select the most effective one for use on the ground.

A method for objective analysis of public interest in resource management issues has been developed and field tested. Recent years have seen a new increase in the level of general public interest in how their forests and other publicly owned resources are managed. Officials often are deluged with letters, petitions, and formal testimony on management alternatives. Handling and understanding large volumes of this kind of information is difficult. Forest Service scientists have developed, tested, and refined a system for processing large numbers of varied kinds of messages from the public. This system simplifies handling the information and expedites analysis of the contents of the messages. The system is called CODEINVOLVE and has been used successfully by several National Forests.

People's reactions to changes in forest scenery can be measured. Americans are more concerned today than ever before about preservation of quality forest scenery. Resource managers need to include landscape scenery in the overall management planning process. This is difficult partly because there is no generally accepted method of quantifying scenery. We will never reduce all scenery esthetics to

quantifiable terms, but development of some quantified indices will contribute greatly to improved environmental management. It also will make it possible to validate new landscape design concepts. A beginning step in this direction has been made. Researchers have developed and tested a method of quantifying scenic beauty as viewed by the public. The method involves an adaptation of a technique developed a few years ago by researchers, the theory of signal detection. Their studies showed that this approach can be used to find out whether people really observe forest management practices. It also can be used to develop index numbers for relative preferences for alternative scenes, landscapes, or management practices.

Knowing forest visitors' preferences leads to improved service to the public. Data on forest visitors' preferences can improve planning and management of recreational opportunities. When collected and analyzed, this information can help managers do a better job of serving the public, as well as protecting the resources. For example, analysis of users of campgrounds on the Superior National Forest in Minnesota showed that some campgrounds were used six times as much as others.

Preferences revealed by the research were: Sites near water, a scenic view, fishing opportunities nearby, uncrowded conditions, being away from main roads and towns, and small campgrounds (fewer than 15 campsites). In the southern Appalachian forests visitors' preferences for features of developed campsites have been measured. The location of the comfort station was the most important factor people considered in selecting a campsite. Shading was next most important with moderate shade preferred over either full shade or little shade. Accessibility of drinking water also is important, but most campers want to be 50 to 100 feet away from community hydrants. Findings to date also provide clues about management of grass and shrubs, arrangement of facilities, and the importance of fairly level but well-drained campsites.

Trees and shrubs for difficult recreation sites. Many Western areas that offer recreational opportunities such as fishing, boating, or hunting do not have enough native trees or shrubs to provide adequate shade, screening, windbreaks, traffic barriers, or pleasing scenery for visitors. Research in California is finding better ways of establishing and growing trees and shrubs in difficult areas, such as at reservoir sites. Methods that work include irrigation, fertilization, mulching, selection of adapted species, and horticultural care of trees and shrubs.

Project (16)

FIRE AND ATMOSPHERIC SCIENCES RESEARCH

1973	$7,964,000
1974	7,847,000
1975	8,067,000
Increase	+220,000

An increase of $220,000 is proposed as follows:

(1) To provide for the full year costs of the pay increase effective in fiscal year 1974, $43,000.

(2) To provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313, $177,000.

The fire research program develops knowledge and technology to reduce forest fire costs and to protect the quality and productivity of American forests. This research is designed to aid all private, State, and Federal agencies in protecting 1.2 billion acres of forest and watershed lands. Although research has aided in bringing about a major percentage reduction in total forest fire losses, increasing use of forest lands makes the forest fire control job more difficult than ever before.

Opportunities to make substantial savings through development of new technology for fire prevention and control are clearly evident. Timber supply impacts from fire loss now average 1.5 million acres of commercial forest land burned per year. Environmental quality degradation results from fires on some five million acres on all classes of lands each year. The devastating fires of 1973 in the Northwest and California provide current evidence to the increasing severity of forest fire problems. The current fire research program is focused on:

(1) Fire prevention.
(2) Fire hazard reduction.
(3) Fire control systems.
(4) Prescribed burning smoke management.

Examples of Recent Accomplishments

New modular fire retardant system is used operationally on Western forest fires. A modular fire retardant system which can be quickly adapted to a wide range of aircraft, including helicopters, has been developed and tested in cooperation with the Air Force. This system allows aircraft to be temporarily equipped for fire-fighting under emergency situations and to fulfill other missions the rest of the year. Successful testing of this unit in large helicopters was recently completed. A C-130 aircraft with this system installed was used operationally on forest fires in the West last summer and demonstrated its projected capabilities during rigorous field operations.

National Fire Danger Rating System is used by the entire Forest Service and several related agencies. The National Fire Danger Rating System was made operational nationwide in 1973. The system measures potential fire suppression requirements due to fuels and weather changes. This integrated system is the operational payoff from various long-term research efforts and is used for the allocation of manpower, equipment, and fire protection funding. It is completely automated and has provisions for data storage, trend analysis and continuous updating to incorporate new technology.

Airborne infrared forest fire system used to monitor spread of wildfires in southern California. As part of the current effort to develop a unified, multi-agency command and control system for emergency operations in southern California, sequential rate of spread measurements have been made using remote sensing. The airborne infrared sensing system, developed by the U.S. Forest Service, was used successfully to make sequential fire images to measure and predict the rate of fire spread. This technique enables a command and control center to update its fire behavior predictions and make more efficient allocations of manpower and equipment to conflagration type fires.

New wilderness fire management plan becomes operational. In order to gain information to help the managers of several million acres of dedicated wilderness protect and maintain these natural environments, a wilderness fire management plan was put into operation in western Montana. The plan was designed to allow wilderness managers to safely reintroduce fire into these environments where appropriate, thus preventing long-term ecological change, degradation and hazardous fuel buildup. Suppression efforts were modified on five lightning fires and the results were successful in both cost savings and predicted effects. This effort will be expanded to include other regions and conditions.

Project (17)

FOREST INSECTS AND DISEASE RESEARCH

1973	$10,697,000
1974	10,761,000
1975	10,936,000
Increase	+175,000

A net increase of $175,000 is proposed as follows:

(1) Increase of $91,000 to provide for the full year costs of the pay increase effective in fiscal year 1974.

(2) Increase of $444,000 to provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313.

(3) Decrease of $240,000 reflects completion of the non-recurring tussock moth research in 1974.

(4) Decrease of $120,000 is based on the discontinuation of research for which funding was increased in 1974.

The mission of forest insects and disease research is to provide the knowledge and technology to:

(1) Define, measure, and evaluate the impacts of destructive insects and diseases on forest resources, and on wood in storage and use.

(2) Detect, assess, and predict changes in the occurrence of these pests.

(3) Reduce their numbers and impacts to tolerable levels by means of control techniques and management strategies that are ecologically sound, economically practical, and environmentally acceptable.

Current research is strongly oriented toward developing comprehensive integrated pest management systems for major forest insects and diseases.

Special emphasis is being given to:

(1) Understanding and quantifying the full impacts of pests such as the gypsy moth, southern pine beetle, Douglas-fir tussock moth, mountain pine beetle, spruce budworms, dwarf mistletoes, fusiform rust, and root rots.

(2) Finding and developing specific microbial and other biological agents for control of the gypsy moth, Douglas-fir tussock moth, root rots, and similar major pests.

(3) Finding and developing safer chemicals for suppressing or manipulating pest populations. These materials include systemic fungicides; insect attractants, repellents, deterrents, and other behavioral chemicals; as well as more selective, nonpersistent toxicants.

(4) Developing specialized equipment and improved techniques for efficient and safe application of pesticidal materials to individual trees and to forested areas.

(5) Developing technology to detect, monitor, evaluate, and reduce adverse environmental effects of air pollutants in forest and related ecosystems.

(6) Integrating control techniques and strategies into pest management systems that utilize pest-resistant varieties and cultural, chemical, and biological methods.

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Examples of Recent Accomplishments

Microbial insecticides effective against Douglas-fir tussock moth. Aerial applications of two microbial insecticides, a virus and a bacterium, gave promising results in small-scale field tests in Oregon in 1973. Preliminary evaluation showed that the virus caused much mortality of tussock moth larvae while trees were not defoliated as in untreated areas. The bacterium applications in an experimental formulation were equally effective but commercially available formulations did not give adequate protection. Research is continuing to improve formulations, and methods of application, and to provide the data needed for registration.

Bt registered for aerial application to reduce gypsy moth damage. The registration of the microbial insecticide Bt (Bacillus thuringiensis) for aerial application as a foliage protectant against the gypsy moth and associated hardwood defoliators makes available an acceptable alternative to the use of chemical pesticides in heavily populated suburban areas. This achievement resulted from extensive field tests conducted by Forest Service researchers and cooperators in New York, New Jersey, and Pennsylvania. Additional tests are planned for 1974 to further evaluate both the formulation and the delivery system.

Silvicultural control for Southwestern ponderosa pine dwarf mistletoes. A computerized system for optimizing silvicultural control treatments against dwarf mistletoe in lodgepole pine now has been extended to include Southwestern ponderosa pine. With this new computer program, future timber yields resulting from various cultural treatments such as choice of regeneration system, frequency and intensity of sanitation thinnings, and stand rotation ages can be predicted. These yield predictions will permit decisions on how best to reduce dwarf mistletoe impacts and will help the Southwest meet and upgrade sustained-yield timber production goals.

Borer problems quantified in North Dakota shelterbelts. The threat of borer damage has reduced the planting of green ash, a highly desirable tree for Great Plains windbreaks. A Forest Service survey revealed the extent and severity of the problem in North Dakota. The two borers--the carpenterworm and the ash borer--were most abundant in the Southwestern part of the State. The ash borer was found in about half the plantings sampled, and the carpenterworm in 28 percent. A borer problem of this magnitude should not prevent planting green ash because practical pest control practices can provide adequate protection for wind barriers.

Controls developed for preventing brown spot disease of Scotch pine Christmas trees. Prevention of brown spot is necessary for profitable Christmas tree production in the North Central States. Losses to brown spot needle disease in Scotch pine Christmas tree plantations can be reduced by newly devised cultural and chemical control techniques. The disease often can be prevented or reduced by establishing Christmas tree plantations in disease-free areas and by avoiding the transmittal of disease inoculum from diseased to healthy plantations on shearing equipment. For areas where cultural controls are inadequate, a single, properly timed application of Bordeaux fungicide will protect trees from the disease for an entire season.

Treatment costs for application of pesticides can be reduced. Lower concentrations and improved application of pesticides can reduce costs and environmental contamination in western bark beetle control programs. Field tests in Wyoming have shown how to reduce the amount of pesticide needed to kill spruce beetle larvae and pupae in downed trees. Studies on mountain pine beetle in ponderosa pine have shown that height of bole treatment can be reduced. Large-scale tests are now needed to determine the practicality of altering current operational control recommendations.

Project (18)

FOREST PRODUCTS UTILIZATION RESEARCH

1973	$9,394,000
1974	9,723,000
1975	9,895,000
Increase	+172,000

An increase of $172,000 is proposed as follows:

(1) To provide for the full year costs of the pay increase effective in fiscal year 1974, $79,000.

(2) To provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313, $93,000.

The recently published "Outlook for Timber in the U.S." explains why America's demand for lumber, plywood, and paper will greatly increase in the decades ahead. If present price structures continue, shortages in softwood sawlogs and fine hardwoods are likely to occur. It is imperative, therefore, to conduct research leading to more efficient utilization of timber from public and private forest lands. It is equally imperative that utilization practices be concerned with protecting the environment and that consideration be given for the conservation of energy in conversion processes.

Within the major Forest Service goals of supplying timber and improving environments, the focus of forest products utilization research is on:

(1) Producing the knowledge and technology necessary for improved utilization practices.

(2) Reducing losses in quality and quantity of wood in storage and use, and extending the service life of wood in use.

(3) Developing technologies to manufacture wood products without impairment of environments.

(4) Developing technologies to utilize wood and paper wastes.

(5) Developing technologies that will produce or conserve energy in forestry-related activities.

In fiscal year 1974, research leading to the utilization of forest residues in structural particleboard is being emphasized.

Examples of Recent Accomplishments

Improved utilization.

(a) A research and development program is directed toward making technically and economically possible the industrial production of a structural particleboard suitable as sheathing. The goal of the program is to have the board commercially available within four years. Progress to date includes the development of technical and economic specifications, a comprehensive search of significant patents, an initial market analysis, and the first steps toward development of a laboratory prototype board. Industry representatives are in close liaison with this program. Program benefits will include both an extension of timber supplies and a reduction of the undesirable effects of forest residues on harvested sites.

(b) Research and design efforts have led to a new machine for converting small logs to lumber. At the same time it produces high yields of engineered flakes suitable for structural particleboards. A small prototype model has been manufactured and a full-sized prototype is now under contract. This

shaping lathe headrig, which is under public patent, can revolutionize log conversion where lumber and flakewood products are the objective.

(c) A report prepared for the Forest Service by the consulting firm of H. C. Mason and Associates, Inc., shows the importance of improved utilization in stretching available timber supplies to meet demands for lumber and other wood products. The report, using cost-benefit analysis, identifies and quantifies three major short-term opportunities for increasing processing efficiency of logs: (1) application of currently available sawing and planing technology; (2) commitment of rigorous quality control practices; (3) installation of automatic sawmill controls.

(d) A continuing program effort in forest utilization research has been the development of new knowledge and technologies to improve the efficiency of lumber recovery in the sawmilling process. In order to get the new technologies into use, Forest Service teams are taking research results directly to the sawmills. Working on an invitation basis, the teams have analyzed 109 mills for ways to increase efficiency and have a waiting list of 100 mills. It is estimated that implementation of rigid quality control programs with little or no capital investment can increase yields by 10 percent. Adoption of new manufacturing and machinery systems could increase efficiency by another 15 percent.

Loss of wood in storage and use.

(a) There is no completely satisfactory preservative treatment for Rocky Mountain Douglas-fir. Pilot tests of a new approach involving introduction of an enzyme solution into Douglas-fir poles markedly improved the creosote treatment. Enzyme pretreatment increased depth of creosote penetration to full sapwood increment, increased total creosote retention, and produced an essentially "dry" surface. Results show strong promise for a suitable treating method which could make this and other difficult-to-treat species a valuable reserve timber supply for poles.

(b) Twenty-five percent of the pulpwood comes from primary wood processing plant residues in the form of wood chips. During storage, wood chips undergo significant deterioration (one percent per month). Recent research has shown that green liquor generated from kraft pulping wastes can provide effective control of degradation of pine and aspen chips.

Technologies to manufacture wood products without impairment of rural and urban environment.

(a) The pulping and bleaching of wood, using oxygen in place of sulfur and chlorine compounds, offer possibilities for the reduction of pollution associated with currently used pulping methods. A disadvantage of oxygen pulping, however, has been the degradation of wood fibers. Recent research on oxygen-wood pulping reactions has identified and quantified degradation products. This information is essential to the continuing development of oxygen pulping as a commercially viable system.

(b) Conventional papermaking requires large quantities of water. Research seeking to reduce the water requirements necessary for quality paper manufacture has determined the least amount of water to be added to dry-formed sheets of paper in order to develop adequate sheet strength. Adding moisture to a 60 percent level results in sheet strengths comparable to those of conventional sheets. Density and stiffness levels of about 60 percent of those of conventional sheets can be attained by adding only 20 percent moisture to dry-formed sheets.

Project (18)

Technologies to utilize or dispose of wood and paper wastes. In the recycling of waste paper from urban trash, there have been no generally applicable adequate mechanical methods for separating mixtures of plastic films and paper. Forest Service research has developed two effective methods. One utilizes the principle of thermoplastic films adhering to a heated surface. The second method consists of suspending the mixtures of waste papers and thermoplastic films in a hot gas to contract the film to ball-like forms. Both methods are practical and the second method uses presently available equipment.

Production and conservation of energy in forestry-related activities. A study was conducted to determine the potential of wood residues in the Pacific Coast States for production of electrical energy. A major objective was to provide information necessary to facilitate increased use of wood residue and reduce waste and pollution associated with disposal of logging wastes.

It was determined that some of the wood-to-energy conversion costs would need to be absorbed by the public in order to use residues for fuel for commercial power generation today. However, this situation may be improved as other fuels become more costly. Use of more factory residues for generation of processing steam at wood industry processing plants was shown to be feasible now.

Project (19)

FOREST ENGINEERING RESEARCH

1973	$1,498,000
1974	1,547,000
1975	1,593,000
Increase	+46,000

An increase of $46,000 is proposed as follows:

(1) To provide for the full year costs of the pay increase effective in fiscal year 1974, $11,000.

(2) To provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313, $35,000.

Forest engineering research provides direct support to managers and planners through development of essential new forest management technologies. Timber harvesting, transportation planning, and mechanization of other forest practices have engineering components that require systematic study. Solutions have far-reaching implications affecting many forest management practices.

Forest engineering research has the following objectives:

(1) Producing the knowledge and least cost technology necessary for more efficient and environmentally sound harvesting and transportation practices.

(2) Developing engineering criteria for minimizing environmental and socio-economic impacts of mineral development on forest and related lands.

(3) Developing the engineering systems needed to permit more effective and economical reforestation and silvicultural improvement operations.

Examples of Recent Accomplishments

Running skyline logging system operational. A first generation running skyline suitable for long span harvest of timber typical of the Pacific Northwest is now industrially operational. A second generation running skyline suitable for smaller timber typical of Interior West is nearly ready for pilot testing. A third generation is in the early design stages and will be pilot-tested within three years.

Project (19)

This family of new skylines will provide techniques for logging environmentally sensitive slopes under almost any set of terrain, tree size, or environmental situations.

Weight estimating procedure permits efficient helicopter logging. Log weights and centers of gravity must be efficiently predicted to enable skyline, balloon, or helicopter logging to be conducted safely and economically. Helicopters, especially cannot operate profitably unless near-maximum loads are carried. Research has provided interim procedures for estimating average weights for logs of different size for different species. This method can serve to safely allocate helicopter loads until more rapid and accurate techniques are developed.

On-site chipping increases wood recovery by 35 percent. More intensive utilization of post-logging forest residues depends upon economical methods for materials handling and conversion to chips or other transportable-sized material suitable for papermaking or particleboard. Recent research has developed a whole tree logging system for on-site conversion of logs into chips. In a Wyoming test, on-site chipping increased wood recoveries by 35 percent over logging for sawlogs only.

This not only significantly increases wood recovery but greatly enhances esthetics, facilitates migration of game animals, and provides an easier and more assured planting or seeding bed. Complete tree removal obviates the necessity for post-logging slash burning with attendant reductions in fire hazards and air pollution.

Project (20)

FOREST RESOURCES EVALUATION

1973	$3,496,000
1974	3,649,000
1975	3,820,000
Increase	+171,000

An increase of $171,000 is proposed as follows:

(1) To provide for the full year costs of the pay increase effective in fiscal year 1974, $34,000.

(2) To provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313, $137,000.

Forest land in the United States varies greatly in productivity, ownership patterns, availability for industrial use, and opportunities for management intensification. Accelerating changes in forest conditions result from changing land uses, timber growth, cutting, and losses to destructive agents. Demands on forest lands for non-timber uses are also increasing. Consequently, up-to-date inventories of forest land and timber resources are essential to guide programs for production of timber and other forest values.

Forest resources evaluation is carried out to:

(1) Determine current trends in the timber resource situation.

(2) Determine the outlook for timber growth and supplies available for future harvests.

(3) Identify prospective timber and nontimber resource management problems.

(4) Analyze the effects of alternative programs for meeting prospective forest resources demands.

(5) Identify opportunities for economic development based on forest resources.

Examples of Recent Accomplishments

Major analysis of outlook for United States timber published. "The Outlook for Timber in the United States," the latest in a series of periodic appraisals of United States timber supplies and demands, was published in October 1973. Timber inventories on the commercial timberlands of the United States contained 715 billion cubic feet of wood in 1970. This was somewhat greater than the inventory estimated in 1963. This analysis revealed further that American forests, in response to programs of forest fire control, tree planting, and other forestry measures registered a gain of 14 percent in net growth between 1962 and 1970. The study also shows that additional investments in timber growing are needed to enable the Nation's forests to meet the expanding demands for wood products without increases in the real prices of these products. This situation may be accentuated by further reductions in the area of commercial forest land and by restrictions on timber harvesting in order to protect and enhance other forest values.

Forty-seven million acres of commercial forest land were reinventoried during fiscal year 1973. Field surveys were conducted in Alabama, Alaska, California, Georgia, Iowa, Kentucky, Louisiana, Mississippi, Missouri, New Hampshire, North Carolina, Oregon, South Dakota, Vermont and West Virginia. Reports appraising the forest resource situation were issued for six States and portions of States. At this rate, all States are being reinventoried on an average of every 11 years, which is less frequent than desired by many users.

New survey techniques developed. Evaluation of timber producing capacity and efficiency of timber surveys have been enhanced by new procedures. Many forest areas, especially in the West, have timber stocking capacities so limited that they are not reflected in customary productivity measurement tools such as normal yield tables. Two procedures which were developed to overcome this limitation were (1) discounting techniques to apply to normal yield tables and (2) equations based on site index, elevation and the presence of certain indicator plants. Aerial photography, long a traditional tool of forest survey, was further evaluated as a means of efficient double sampling for timber inventory; and new procedures for avoiding "oversampling" bias on non-forest lands from aerial photography were developed.

Survey shows southern pulpwood production at all-time high of 44.3 million cords in 1972. Timber products output surveys such as the Southern Pulpwood Survey help relate timber supply to demand. The South's 11 States produced 44.3 million cords of pulpwood in 1972, or about 60 percent of the Nation's total. Three quarters of this total for the South was roundwood harvested from standing timber, and the remainder was residue from other wood using plants. New pulpmills under construction in the South appear likely to increase need for pulpwood output from Southern forests.

Project (21)

FOREST ECONOMICS AND MARKETING RESEARCH

1973	$3,500,000
1974	3,653,000
1975	3,774,000
Increase	+121,000

An increase of $121,000 is proposed as follows:

(1) To provide for the full year costs of the pay increase effective in fiscal year 1974, $35,000.

(2) To provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313, $86,000.

Forest economics and marketing research seeks to improve economic benefits from use of the Nation's forest land for timber and other values, including water, recreation, range, and wildlife. Research is conducted on:

(1) Uses and demands for wood products and other forest values to provide necessary inputs for assessing future demands on the Nation's forest lands.

(2) Reducing costs in timber growing, harvesting, processing and product distribution to achieve more efficient use of available timber resources.

(3) Timber growing and multiple use management policies and practices, including impacts on environmental quality, to provide guidelines for development of forest resources.

(4) Evaluations of new technology to help guide implementation of a wide range of technical advances.

Collectively, the results of forest economics and marketing research constitute a major source of information for formulating forest management and use policies and practices at the national, State, and local levels.

Examples of Recent Accomplishments

Opportunities for improving timber management analyzed. As part of "The Outlook for Timber in the United States," forest economists completed a major program of identification, screening, and financial analysis of opportunities for improvement in timber management in the United States. Included were all lands in public and non-industrial private ownership, with particular emphasis on opportunities in the Southeast, Northeast, North Central, and the Washington-Oregon-California forest types. Management practices considered were reforestation, stand release, pre-commercial thinnings, and commercial thinnings and salvage. The study found that opportunities for timber management improvement are likely to increase significantly if timber prices rise over the next few decades.

Demand for wood estimated. In "The Outlook for Timber in the United States," consumption of timber products in major end uses such as new housing, nonresidential construction, manufactured wood products, wood pulp products, shipping and miscellaneous uses was analyzed. Projections of potential future demand for timber products in each of these uses to the year 2000 were made under three levels of assumptions as to population and economic growth, and relative prices of timber products. Total requirements for lumber, veneer and plywood, pulpwood, and other timber products were converted to roundwood equivalents to arrive at estimates of total current and future demand for roundwood from United States forests.

With prices of timber products relative to other materials at 1970 levels, the "medium" projection of United States demand for roundwood rises from 12.7 billion cubic feet in 1970 to nearly 23 billion cubic feet by the year 2000.

Postal Service anticipates savings $3 to $15 million per year by adoption of new pallet marketing systems. The Forest Products Marketing Laboratory at Princeton, West Virginia has given major attention to marketing research designed to improve product distribution systems using wooden pallets and utilization research to provide for efficient pallet construction through use of the abundant low grade hardwood resource. This research culminated in October 1973 with an announcement by the U.S. Postal Service of adoption of these marketing systems and pallets. In addition, a major private firm has entered into a one year exploratory pallet leasing program which is also based on research conducted at Princeton.

The Postal Service program is designed to move fourth class mail, primarily magazines, from major sources to major distribution points around the country. A separate study by the Postal Service confirmed the advantages cited by the Forest Service researchers and showed that use could range from 200,000 - 2,000,000 pallets per year at a savings to the Postal Service of $3 - $15 million. This program is scheduled to start in January 1974.

Long-term timber contracts in the South aid landowners and industry. A study in 11 Southern States disclosed that under long-term contract arrangements, Southern wood-using industries control almost 7 million acres of privately-owned, non-industrial forest land. While pine is the predominant timber type under contract, there are also substantial acreages of hardwood. Nearly all agreements are written on an individual basis. Such agreements have advantages for both owners of non-industrial forest lands, and for forest industry firms leasing or contracting for timber from such lands.

New system developed for multiple product measurement. Forest Service scientists in the South have developed a computer-based methodology for the simultaneous weight-scaling of multiple-products in tree-length log shipments. While weight-scaling of pulpwood is now widespread in the South and elsewhere, recent trends toward tree-length logging and hauling have created a need for a fast and accurate method of simultaneously measuring both sawlog and pulpwood material. This new system should have wide application throughout the South, as well as other regions of the country.

GEOGRAPHIC BREAKDOWN OF APPROPRIATIONS

State and Private Forestry Cooperation

	1974 estimate	1975 estimate	Change
		(in thousands)	
Alabama	$760	$835	$75
Alaska	540	550	10
Arizona	145	150	5
Arkansas	685	735	50
California	1,410	1,510	100
Colorado	395	400	5
Connecticut	245	250	5
Delaware	325	330	5
District of Columbia	991	1,006	15
Florida	985	1,045	60
Georgia	1,040	1,160	120
Guam	5	5	- -
Hawaii	100	105	5
Idaho	485	500	15
Illinois	330	335	5
Indiana	575	580	5
Iowa	120	125	5
Kansas	330	320	-10
Kentucky	650	680	30
Louisiana	770	820	50
Maine	670	690	20
Maryland	395	405	10
Massachusetts	310	315	5
Michigan	825	875	50
Minnesota	545	565	20
Mississippi	805	880	75
Missouri	780	825	45
Montana	425	440	15
Nebraska	280	285	5
Nevada	345	345	- -
New Hampshire	205	220	15
New Jersey	410	415	5
New Mexico	230	235	5
New York	1,060	1,120	60
North Carolina	1,010	1,120	110
North Dakota	90	95	5
Ohio	395	410	15
Oklahoma	380	390	10
Oregon	775	870	95
Pennsylvania	1,005	1,065	60
Puerto Rico	110	115	5
Rhode Island	245	250	5
South Carolina	810	885	75
South Dakota	160	165	5
Tennessee	795	855	60
Texas	610	645	35
Utah	255	255	- -
Vermont	175	190	15
Virgin Islands	30	30	- -
Virginia	845	875	30
Washington	850	920	70
West Virginia	375	400	25
Wisconsin	890	945	55
Wyoming	205	210	5
Total	28,181	29,746	1,565

Project (22)

COOPERATION IN FOREST FIRE CONTROL

1973	$25,025,000
1974	20,079,000
1975	20,177,000
Increase	+98,000

An increase of $98,000 is proposed as follows:

(1) To provide for the full year costs of the pay increase effective in fiscal year 1974, $13,000.

(2) To provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313, $85,000.

Protection of non-Federal land from destruction by fire is primarily a State and local responsibility. The Federal role is one of providing technical support and financial assistance as incentive to the States in their effort.

Protection from fire is a necessity for the development of all forest resources--water, timber, special forest products, wildlife, forage, and recreation. The Cooperative Forest Fire Control program is authorized by the Clarke-McNary Act of 1924. During the first five-year period of the program (1924-1928) losses from wildfire were high with an average of 262 fires and 58,800 acres burned per million acres protected. This compares with 177 fires and 2,802 acres burned per million acres protected during the most recent five-year period (1968-1972). Another positive factor is the increase in protected area from 284 million acres in 1924 to over 631 million acres in 1972. Protection costs have grown from $1.9 million in 1924 to over $120 million in 1973. Much of the increase in fire control costs is due to the greater use of more effective and expensive new types of equipment and higher operating costs. There has been a significant increase in the use of aircraft in fire detection and suppression which is costly. Also, the decrease in purchasing power of the dollar has had a marked impact. Use of the most effective and modern firefighting equipment is essential in order to get the maximum production of goods and services from the Nation's non-Federal forest and non-forest watershed lands.

Risks of fire continue to increase as a result of greater accessibility of forest lands and a rapidly increasing public use of forest areas. To offset this increased risk, the development of better and more efficient fire equipment must be made. A well trained and properly equipped fire organization is essential if rural America fulfills the expectations of its residents for a safe place to live with adequate job opportunities. Also, if increased investments are to be made and have some assurance they will not be destroyed by fire, protection capability must be improved and increased.

This program enables the State forestry agencies to organize and train effective fire control organizations. Air and water pollution will be lessened by reducing the number of wildfires, especially the large (over 300 acre) disaster-type fires. These are the most destructive as well as the most costly fires. A new fire protection analysis is now underway. Information obtained from this thorough analysis will help to better direct fire organizations efforts in coming years. Law enforcement training will be increased to provide a better means to reduce man-caused fires. Increased emphasis will be made in use of fuels management, including the use of prescribed fire as a tool in the overall fire prevention effort. Results of the national fire prevention study, currently in progress, will be used in implementing an action program.

A formula that applies uniformly to all 50 State cooperators is used in distributing the Federal funds. The formula recognizes the two factors most directly related to fire control:

(1) Extent of the fire protection job.

(2) State and local performance as represented by expenditures.

Each of these factors is given equal weight. The half based on need is termed the "regular allotment" and is determined by a periodic fire protection analysis. A new analysis is currently in progress. The half based upon expenditures uses the average of the most current 3-year State and private expenditures and is termed the "extra allotment." The total of these two parts becomes the Federal allotment to each State. A sliding scale is used to reduce the total allotment to bring total State payments equal to available funds.

The table following this section shows proposed financing for fiscal year 1975 compared with fiscal years 1973 and 1974.

Examples of Recent Accomplishments

Prevention. The results of the fire prevention contactor program initiated in 1968 by the Louisiana Forestry Commission in a high man-caused fire area have indicated very significant results. Average fire occurrence was reduced 50 percent during the 4-year period 1968 through 1971, and 66 percent through 1972 as compared to the 4-year average fire occurrence during the 1964 through 1967 period preceding the project. Other States which have started or plan to use contactor type prevention programs are: Alaska, Colorado, Georgia, Florida, Kentucky, Mississippi, and Tennessee. California hired 43 fire prevention aids under the student assistance program. They were all college students, both male and female, and worked on prevention, inspection, and permit programs. Smokey Bear summer reading programs were established or expanded through local public libraries in Arizona, Florida, South Carolina, California, and Pennsylvania.

Other. Hawaii used helicopters for fire surveillance and early detection. There were State bans on open burning in Nebraska and Alaska, and Wyoming had Smokey Bear Day proclaimed by the Governor. Maryland started a Junior Forest Ranger Program, and Minnesota held a special meeting with railroad officials operating in the State which helped to reduce fires caused by railroad operations. Wisconsin held special fire investigation training prior to the fire season which helped to increase apprehension of fire starters. One group apprehended had started 20 fires. Effective and fast first attack held the number of large fires to 327 which is the least number in the past 10-year period.

Project (22)

COOPERATIVE FOREST FIRE CONTROL

	State and Private Funds Expended FY 1973	Federal Allotments FY 1973	Federal Allotments FY 1974	Federal Allotments FY 1975 (estimate) 1/
Alabama	$1,948,085	$582,500	$582,200	$582,200
Alaska	3,750,024	359,200	387,400	387,400
Arizona	111,940	65,200	65,200	65,200
Arkansas	1,852,751	536,800	531,200	531,200
California	21,588,809	1,284,500	1,243,100	1,243,100
Colorado	1,573,930*	246,600	297,700	297,700
Connecticut	243,303*	144,300	138,000	138,000
Delaware	69,114	50,600	50,400	50,400
Florida	8,311,208	720,500	706,700	706,700
Georgia	7,004,065	760,100	735,500	735,500
Hawaii	107,188	66,300	65,700	65,700
Idaho	691,489	399,200	388,600	388,600
Illinois	434,519	144,800	162,100	162,100
Indiana	293,587*	98,900	101,100	101,100
Iowa	122,754	71,500	69,200	69,200
Kansas	884,310	228,800	242,200	242,200
Kentucky	1,287,434*	434,400	435,100	435,100
Louisiana	3,228,476	645,400	635,300	635,300
Maine	2,062,305	507,100	501,000	501,000
Maryland	974,513	277,800	281,500	281,500
Massachusetts	598,377	250,500	242,200	242,200
Michigan	3,304,423	638,900	625,300	625,300
Minnesota	970,544	410,100	396,800	396,800
Mississippi	3,493,727	623,300	628,500	628,500
Missouri	1,043,866	522,200	531,200	531,200
Montana	1,044,626	221,000	234,700	234,700
Nebraska	817,163	199,500	207,800	207,800
Nevada	385,278	220,500	228,100	228,100
New Hampshire	426,849	137,800	134,700	134,700
New Jersey	1,000,882	290,500	295,600	295,600
New Mexico	104,045	89,600	88,300	88,300
New York	2,012,513	537,200	537,600	537,600
North Carolina	4,128,762	672,000	662,200	662,200
North Dakota	36,901	38,700	38,200	38,200
Ohio	535,798	234,400	228,600	228,600
Oklahoma	739,614	277,000	298,200	298,200
Oregon	3,844,517*	676,500	660,100	660,100
Pennsylvania	3,316,676	503,500	506,000	506,000
Rhode Island	233,343*	78,400	76,300	76,300
South Carolina	3,440,253	611,500	613,000	613,000
South Dakota	359,613	94,400	102,000	102,000
Tennessee	2,535,917	613,200	607,400	607,400
Texas	1,641,258	439,700	443,300	443,300
Utah	466,277	156,700	158,000	158,000
Vermont	97,575*	78,900	76,400	76,400
Virginia	2,279,647	566,000	565,200	565,200
Washington	5,655,418*	677,400	663,300	663,300
West Virginia	699,824	259,300	258,100	258,100
Wisconsin	3,032,610	615,400	616,000	616,000
Wyoming	284,570	132,900	149,200	149,200
Administration, inspection, prevention and special services		1,533,500	1,587,500	1,685,500
Reserve		5,000,000		
Total	105,070,670	25,025,000	20,079,000	20,177,000

* Estimated expenditures. Actual fiscal year 1973 expenditures not available.

1/ While the amount available to a State may, if the allotment is small, exceed previously computed expenditures by that State, the actual payment to a State never exceeds State and private funds expended by or under the control of the State.

Project (23)

COOPERATION IN FOREST TREE PLANTING

1973	$327,000
1974	332,000
1975	333,000
Increase	+1,000

An increase of $1,000 is proposed to provide for the full year costs of the pay increase effective in fiscal year 1974.

This program provides financial and technical assistance to cooperating States in the production, acquisition, and distribution of tree seed and planting stock for forest and windbarrier plantings on non-Federal lands. Seed and trees thus furnished at modest cost form the backbone of current public forestation efforts which contribute to increased timber production and the enhancement of environmental values, including public recreation, wildlife habitat, and pollution abatement.

Program funds are used to assist the States in meeting the cost of seed extraction, seedling production, nursery maintenance, and other operations.

The procedure for allotment of funds provides for a project approach with funds to be allocated on the basis of projects which will be designed to stimulate more efficient nursery operations. Proposals to date include projects such as:

(1) Containerized seedling production.

(2) Mechanized seedling harvest.

(3) Development of improved methods for seedling storage.

The number of trees that States shipped to landowners during each of the past four fiscal years follows:

Year	Federal-State Coop. Program--Seedlings
1969	523,986,000
1970	494,941,000
1971	550,797,000
1972	552,997,000

Examples of Recent Accomplishments

Production of improved genetic quality seedlings. Improved genetic quality forest tree seed is becoming available for seedling production at a rapidly increasing rate. For example, during the 1972-73 season, seed orchard seedling stock amounted to over 100 million seedlings, which means that about 140,000 acres will be growing more wood than would be the case if regular seeds were used.

REGULAR ALLOTMENTS TO STATES

	FY 1974	FY 1975
Arizona	$3,000	$6,000
Colorado	7,000	7,000
Delaware	2,500	2,500
Guam	2,500	2,500
Idaho	12,000	10,000
Kansas	12,000	10,000
Montana	12,000	10,000
Nebraska	8,000	8,000
Nevada	12,000	12,000
New Jersey	2,500	2,500
New Mexico	12,000	10,000
North Dakota	12,000	12,000
Oklahoma	9,000	9,000
Puerto Rico		2,500
Rhode Island	2,000	2,000
South Dakota	12,000	10,000
Utah	12,000	10,000
Wyoming	4,000	4,000

Project (23)

SPECIAL PROJECT ALLOTMENTS TO STATES

	FY 1974	FY 1975
Alabama (Auburn University Project--weed control)	$26,000	$26,000
Arkansas (soil analysis)	750	
California (packing shed)	2,400	
Colorado (containerized seedlings)	1,000	
Connecticut (irrigation)	618	
Delaware (cold storage)	1,750	
Idaho (transplanter)	3,000	
Illinois (foliage analysis)	955	955
Indiana (drainage)	3,000	
Kansas (containerized seedlings)	10,000	
Maine (seedling harvester)	3,000	
Mississippi (seedling harvester)	2,500	
Nebraska (seed source)	2,000	
Nevada (tree nursery)	3,000	
New York (seedling storage)	6,784	
Pennsylvania (cone harvester)	4,000	1,000
Utah (seed production)	3,000	

Project (24)

COOPERATION IN FOREST MANAGEMENT AND PROCESSING

1973	$5,015,000
1974	5,052,000
1975	5,574,000
Increase	+522,000

An increase of $522,000 is proposed as follows:

(1) To provide accelerated technical assistance in systems analysis to sawmill operations through State forestry agencies, $460,000.

(2) To provide for the full year costs of the pay increase effective in fiscal year 1974, $19,000.

(3) To provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313, $43,000.

This assistance will ultimately increase volume recovery of lumber by 15 percent over current yields from cooperating sawmills. Teams of Forest Service-State forestry specialists will work with medium-size sawmills having a combined annual capacity of 3 billion board feet. An increase in production of 450 million board feet per year is anticipated at a Federal cost of $1.25 per thousand board feet. General forestry assistance funds (Project 25) will be used to supplement the total cost ($550,000) of this project.

Through State-Federal cooperative programs, technical assistance is provided to private nonindustrial woodland owners, loggers, wood-using industries, communities, and organizations concerned with the protection, management and use of forest resources. On-the-ground assistance is provided by State professional personnel with training and expert backstopping by Federal specialists.

Three-fifths of the productive forest land in the United States, or 296 million acres, is in the hands of nonindustrial private owners. Most of them lack the technical forestry skills required to manage the lands to provide their share of the Nation's needs for forest products and services. The program provides tech-

nical assistance to these landowners through State service foresters to increase the flow of timber and nontimber products and to improve environmental values. State service foresters provide on-the-ground leadership for the forestry practices under the Rural Environmental Conservation Program, particularly Forestry incentives.

Technical assistance is given to loggers, sawmill, and other plant operators to improve logging, processing and business methods to improve the supply of softwood lumber and plywood through the reduction of wood waste and increased utilization of wood residue.

State forestry personnel and rural communities provide specialized forestry assistance to Rural Development Committees throughout the Nation. State personnel serve State committees, sub-State units, and rural communities, thereby strengthening the overall effectiveness of local rural development efforts.

Technical assistance is provided in cooperation with the State forestry agencies in 50 States, Puerto Rico, and the Virgin Islands. Significant thrusts of the programs are to develop opportunities for private consulting foresters to establish and expand their forestry assistance operations.

Base level Federal appropriated funds are distributed to the States by formula which is applied to each State's need and performance.

(1) Need is based on the number of small woodland owners in the State and the acres of commercial forest owned expressed as a percentage of the total in the Nation.

(2) Performance is based on State funds expended in excess of Federal funds. The excess is determined for each State and then expressed as a percentage of the total excess for all States.

(3) The average of the need and performance percentages for each State represents the State's share of total funds available for distribution.

(4) The minimum allotment to any participating State is $30,000.

Increase will be distributed to States on the basis of appropriation intent and opportunities for increased productivity and accomplishment. Distribution factors will include:

(1) Number of sawmills in the State expressed in terms of national ranking.

(2) Roundwood removals in the State expressed in terms of national ranking.

(3) Ability and interest of the State in participating in sawmill analysis.

Major work accomplishments are shown in the following table:

Major Benefits	Unit	FY 1973	FY 1974
Woodland owners assisted	No.	107,600	110,000
Forest products operators assisted 1/	No.	5,900	7,200
Incidental forestry assistance	No.	178,000	178,000
Area of woodland involved	Acres	5,400,000	7,200,000
Volume harvested under improved practices 2/	MBF	765,970	800,000
	Cords	1,912,995	1,500,000
Area of timber stand improvement 2/	Acres	266,000	373,000
Area planted or seeded 2/	Acres	295,000	344,000

1/ The reporting in this category reflects only those operators assisted which resulted in known product output increases. Assistance is reflected in incidental assistance when product output is unknown.

2/ The reported figures reflect the changing program thrust and increased emphasis on stand establishment and stand management in woodland owner assistance.

Examples of Recent Accomplishments

Maine. Increased demand for wood products coupled with decreasing numbers of woods operators to harvest these products caused the Maine service foresters to target activities towards assisting the remaining operators. This assistance was directed toward improving methods of operations, putting operators and woodlot owners in contact, and periodic visits to cutting operations to insure that the landowner, the woods operator, and the forest resource of the State received equal consideration in carrying out the harvest operation.

Timber stand improvement activities increased through the efforts of the service forester in organizing contract crews to perform woods work for forest landowners. Speculation in land and greatly increased land values result in some reluctance to make capital investments in forest improvement. However, there is increasing awareness that a fully-stocked, well-managed forest can provide regular income and enhance property values.

Assistance to a wood processing firm in the form of an operations analysis resulted in an increased production of nearly 200 thousand board feet of lumber from material that was previously chipped. The firm is also constructing facilities for kiln drying lumber to reduce losses by drying defects. Employment has increased from 60 to 100 people. It is estimated that the State of Maine will realize an additional $26,000 in taxes annually from the increased production. Total Federal Government cost of the assistance was $1,500.

Wyoming. Technical assistance to landowners whose primary interest is cattle grazing has demonstrated that timber growing and grazing are compatible uses for their ownerships. Thinning recommended in mountain pine beetle infested stands: (1) produced immediate income for the owner; (2) will result in increased forage production; (3) increased the growth rate of remaining timber stand; and (4) reduced the likelihood of more serious loss from an increased mountain pine beetle population.

Idaho. Farmers Home Administration required an appraisal of standing timber in order to approve a loan. On the advice of the service forester the owner hired a private consulting forester to prepare the necessary appraisal and management plan for the woodland property. The consultant referred the owner to the service forester for: (1) training in timber marking; (2) recommendations on improving his recreation business; and (3) carrying out logging operations.

The close cooperation between private, State, and Federal employees has contributed to the success of the property owners' operation.

North Carolina. In a three county area in North Carolina, 25 forest landowners have retained private consulting foresters under continuing management contracts. The local service forester is responsible for direct referral of the landowners to private consultants on 17 of the 25.

Alaska. Sawmill clinics were again conducted in the villages of Tanana and Ruby, Alaska, and one in Huslia by State and Forest Service teams. Instruction was given in proper sawing of lumber and processing logs for house construction. Cooperation with the Bureau of Indian Affairs is initiating a program to construct 1,200 homes in Native villages. Locally manufactured lumber will play an important role in construction. The end result will be to raise the quality of the living structures in these remote areas.

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Nebraska. As a result of one individual's work on promoting the establishment of wood shavings mills, there are now 7 mills employing 34 people. Annual production is over 1 million bales of shavings through a capital investment of nearly $500,000. The shavings are made from wood waste that was previously burned.

Florida. How much is standing timber worth? During the average work week of a forester, this question often arises and is not easily answered unless a specific tract of timber is under discussion. Many factors affect price--species, quality, size, volume per acre to be cut, logging conditions, distance to the mill, and market demand. The efficiency and equipment of the logger doing the cutting and the marketing knowledge of the landowner also play a part in the price received for standing timber.

Recently a farm was listed for sale for $75,000. No offers were received for 6 months. Finally, a businessman offered to buy the farm without the timber for $59,000. He thought that the value placed on the merchantable timber was too high. At this point, the landowner requested marketing assistance for the timber from his local service forester. After a detailed explanation of timber values and present demand, the landowner was referred to a local consulting forester for a timber cruise and marketing assistance. Recently, he advised that the timber appraisal indicated a merchantable volume of nearly 500,000 board feet of sawtimber and over 700 cords of pulpwood. The timber was advertised and sold lump sum--the highest bid received was $45,000.

Project (24)

The following table shows proposed financing in fiscal year 1975 compared with fiscal years 1973 and 1974:

	FY 1973	1974 estimate	1975 estimate
Alabama	$115,200	$111,200	$133,600
Alaska	21,800	23,000	23,000
Arizona	19,400	20,000	22,400
Arkansas	95,600	92,300	109,500
California	90,400	78,300	111,500
Colorado	53,200	52,800	57,200
Connecticut	34,100	33,900	33,900
Delaware	23,000	22,000	22,000
Florida	196,500	189,600	194,800
Georgia	215,200	207,700	228,100
Hawaii	18,800	28,000	28,000
Idaho	40,500	39,100	52,300
Illinois	66,500	69,100	71,500
Indiana	61,500	62,500	67,300
Iowa	42,900	42,500	42,500
Kansas	34,900	35,100	35,100
Kentucky	152,300	155,000	163,800
Louisiana	92,600	89,400	102,200
Maine	108,800	105,000	109,000
Maryland	77,100	78,200	82,200
Massachusetts	42,400	41,900	41,900
Michigan	130,800	126,200	135,400
Minnesota	96,100	97,500	101,500
Mississippi	124,100	126,000	144,400
Missouri	146,300	150,100	152,500
Montana	55,000	53,100	61,500
Nebraska	36,300	36,100	36,100
Nevada	34,000	33,000	33,000
New Hampshire	54,500	52,600	55,000
New Jersey	43,100	42,900	42,900
New Mexico	46,700	43,600	47,200
New York	162,300	167,600	174,000
North Carolina	249,800	258,000	282,000
North Dakota	30,300	30,200	30,200
Ohio	104,900	106,100	110,900
Oklahoma	37,300	37,600	37,600
Oregon	65,900	63,600	108,800
Pennsylvania	143,900	147,300	156,100
Puerto Rico	30,000	30,300	30,300
Rhode Island	30,000	25,000	25,000
South Carolina	126,000	121,600	135,600
South Dakota	32,300	32,300	32,300
Tennessee	91,400	92,500	104,500
Texas	83,300	84,600	96,200
Utah	35,400	33,800	33,800
Vermont	85,600	82,600	86,200
Virgin Islands	7,600	13,000	13,000
Virginia	193,700	202,600	220,600
Washington	72,000	72,200	95,400
West Virginia	80,300	81,100	90,300
Wisconsin	189,300	193,600	200,400
Wyoming	33,400	32,200	32,200
Total to States	4,254,300	4,245,500	4,636,700
Forest Service administration	760,700	806,500	937,300
Total appropriation	5,015,000	5,052,000	5,574,000

Project (25)

GENERAL FORESTRY ASSISTANCE 1/

1973	$2,670,000
1974	2,718,000
1975	3,662,000
Increase	+944,000

An increase of $944,000 is proposed as follows:

(1) $90,000 for accelerated technical service to sawmill operators aimed at increasing lumber recovery through improved sawing efficiency. This will supplement a major effort in cooperation with State forestry agencies (see Project (24)).

(2) $750,000 for conducting an intensive technical assistance program directed at loggers to improve harvesting methods. An additional 400 million board feet of lumber can be put on the market annually at a cost of $1.40 per thousand board feet by providing expanded assistance to loggers in felling and bucking practices, use of tree length logging systems, and increasing topwood and stump utilization. Improved harvesting techniques would also reduce the environmental impact of logging operations. Assistance would also be provided to landowners, loggers, and pulp companies to assure the best end use for products from the woods through log sorting and installation of chipping saws. Services would be made available through various contractual arrangements with State foresters, training institutions, private consulting firms, and equipment manufacturers.

(3) $46,000 to provide for the full year costs of the pay increase effective in fiscal year 1974.

(4) $57,000 to provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313.

(5) $1,000 for wild and scenic river studies on State and private lands.

General forestry assistance funds are used to accomplish highly specialized forestry assistance not available through other Forest Service cooperative programs. A major portion of the funds is used to provide professional assistance to State forestry agencies, woodland owners, associations, and the wood industry to enhance rural community development and to achieve more efficient management, increase production, and improve processing of the Nation's timber resources.

General forestry assistance funds are used to provide expert forest resource management and use assistance in such activities as:

(1) Land use planning.
(2) Multiple use management.
(3) Dissemination of forest research findings.
(4) Forest products utilization.
(5) Continuous forest inventory.
(6) Forest hydrology.
(7) Advisory management services provided to State forestry agencies, including organizational management training.
(8) Special studies.
(9) Wild and scenic river studies.

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1/ For comparability, following amounts for Wild and Scenic River Studies on State and private lands are shown under this activity rather than under Soil and Water Management as appropriated: 1973, $200,000; 1974, $159,000; 1975, $160,000.

Technical assistance is provided directly by the Forest Service or through specific agreements with State foresters, colleges, and/or private contractors.

The Forest Service has lead responsibility for the Department of Agriculture relating to studies under the Wild and Scenic Rivers Act of 1968. In addition to the rivers assigned to the Department, the Forest Service coordinates USDA input to Interior-led studies. For fiscal year 1975, some work remains on the original 17 Interior-led studies. In addition, a number of rivers have been proposed for detailed study, under Section 5(a) of Wild and Scenic Rivers Act (PL 90-542). Funds ($160,000, an increase of $1,000) will be used to carry out the full Federal responsibility and to augment the States' efforts under the Act. These activities are needed to fulfill the Nation's demand for a quality environment.

Examples of special projects currently being conducted are:

(1) Rural development and cooperative area land use planning. Special efforts are being made to involve State foresters in cooperative area land use planning and rural development. These efforts are directed toward improving the use of forest resource in all aspects of State and local planning and development. Forest planning and development provides a multitude of benefits to rural communities, such as:

(a) Employment for local workers.
(b) Recreation for resident and non-resident visitors.
(c) Adequate supplies of quality water.
(d) Raw materials such as timber and specialty products that will increase income and jobs.

(2) Special emphasis is being directed toward involving State forestry organizations in the land use planning effort. State forestry personnel are being placed in State Planning Agencies to insure forestry and natural resource inclusion into State land use plans. This is extremely important in order to provide ample consideration for the natural resources and be able to supply adequate timber, recreation, range, water and wildlife resources for the future. Such efforts are underway in Alabama, Alaska, Arkansas, Maine, New Mexico, Pennsylvania, Texas, Utah, and Washington.

(3) Forestry aggregate. Many private nonindustrial forest landowners lack knowledge of forest management and marketing practices. Because of this many of these ownerships are not managed to produce forest products beyond a level which accrues in unmanaged forest stands. A pilot test of aggregation to improve the effectiveness of technical assistance delivery and to provide management and marketing assistance to members of the aggregate organization through the hire of a private consulting forester is underway in Alabama.

(4) Forest products utilization. State and Forest Service personnel, working closely with private consultants and university staff members are extending the Nation's supply of forest resources by determining new and better uses for logging and milling residues and low quality trees. For example, the processing and merchandising of sawdust, bark, and even twigs and needles, has expanded dramatically since foresters began analyzing the benefits of using these materials for soil amendments and as a mulch.

(5) Minority forest landowners. Application of operational governmental programs to further the potential of minority landowners to manage their forest land is the major emphasis of an on-going project in the South. This effort is the culmination of a project completed in the summer of 1973.

(6) A project in New York is directed at analyzing various machines and systems for logging small woodlots in Northeastern United States and the development of suitable systems for the utilization of forest products.

(7) In Vermont, a project is underway to stimulate the acceptance and use of hemlock, heretofore a little used species, for building materials in residential and industrial construction. Expanded use of local woods will relieve pressures on construction material processed in the West and South.

(8) An on-going project in Maine is providing foresters the means to carry out an effective salvage program on the approximately 500 thousand of acres of spruce-fir timber that has been killed by the spruce budworm. Millions of board feet of lumber are being saved while providing jobs and income to local citizens.

Additional projects currently in operation provide special assistance in forest land inventory and multipurpose management techniques--all designed to improve the Nation's forest land.

Examples of Recent Accomplishments

Sawmill improvement program. An accelerated technical assistance program aimed at increasing lumber recovery at sawmills has produced dramatic results since its inception in June of 1973. In four months' time, teams of State forestry and Forest Service personnel have analyzed 110 sawmills. This service identifies ways of reducing wood waste and predicts, through the use of a computer, what recovery standards can be expected if certain changes are made. Preliminary data show that a 13 percent improvement in lumber recovery can be obtained through quality control alone. One hundred sawmills, in addition to those already served, have requested the assistance. The program is operating in 32 States and is limited to softwood lumber producing mills. Requests for followup assistance in mill design and installation of new equipment will be referred to private consultants.

Development of nonindustrial private forest resources in Texas. Under contract with the Texas Forest Service, a proposed 30-year program for the development of the nonindustrial private forest resources of East Texas was drawn. This in-depth study provides the guidance and framework for targeting activities in timber management for the present and immediate future. The report shows that the greatest need is in reforestation and timber stand improvement on the 7,178,000 acres of farmer and miscellaneous private forest ownerships in East Texas. The State forester has directed his organization to give emphasis to this need in all of their activities.

The "Trees for Texas" program that is suggested to motivate private forest landowners requires State, industry, and private funding in order to be fully implemented. Efforts are currently directed toward obtaining this funding.

Utilization of low-grade hardwood logs, Princeton, West Virginia. A workshop was held in Princeton, West Virginia in 1971 to fully acquaint forest products utilization practitioners with innovative ways developed by research of utilizing low-grade hardwood logs through the so-called "SHOLO" process. As a result of this workshop, subsequent follow-up, and promotional activities of forest products utilization specialists, two new wood pallet processing "SHOLO" plants have begun operations in West Virginia. Total production exceeds 50 thousand board feet of previously unused timber and 12 local workers have secured gainful employment.

Use of pine bark for mulch. As a direct result of assistance provided by a Forest Service marketing specialist, a large, national wood-using firm went into the production and marketing of pine bark for use as mulch. Annual production is now nearly 8,000 tons of bark -- material that was previously burned. The company is now considering producing hardwood bark mulch and compressed fireplace logs to be marketed in the East.

Improved hardwood log processing operation. A Southern wood-processing firm, facing dwindling supplies of timber, requested an analysis of their hardwood log processing operation. Information was needed on improved processing methods and data were required to aid in a rational decision as to future plans of the firm. A team of two Forest Service wood utilization specialists conducted the analysis. As a result, the company changed product lines, improving the utilization of available timber, and reducing the raw material requirements. At the same time they increased employment opportunities for local workers.

Regional Land Use Plan and Voyaguers National Park Perimeter Policies Plan, Minnesota. The Arrowhead Regional Planning Commission in Northeastern Minnesota, the Minnesota Department of Natural Resources and the Forest Service have an arrangement whereby a full-time person is providing specialized planning assistance to the Arrowhead Regional Commission. Through Forest Service funding, a Regional Land Use Plan and Voyaguers National Park Perimeter Policies Plan are being prepared. In addition, program design and work statements are being updated. A new element concerning timber resources for the region was completed for inclusion in the revised program design.

FOREST PROTECTION AND UTILIZATION

Proposed Change in Activity Structure

Present Structure	Proposed Structure
FOREST LAND MANAGEMENT:	FOREST LAND MANAGEMENT:
National Forest protection and management:	National Forest protection and management:
(1) Timber resource management:	(1) Timber resource management:
(a) Sales administration and management	(a) Sales administration and management
(b) Reforestation and stand improvement	(b) Reforestation and stand improvement
(2) Recreation-public use	(2) Recreation use a/
(3) Wildlife habitat management	(3) Wildlife and fish habitat management a/
(4) Rangeland management	(4) Rangeland management
(5) Soil and water management b/	(5) Soil and water management b/
(6) Mineral claims, leases, and special uses c/ d/	(6) Minerals management c/
(7) Land classification, adjustments and surveys d/	(7) Forest fire protection
(8) Forest fire protection	(8) General land management activities d/
(9) Maintenance of improvements for fire and general purposes (including communications) d/	(9) Fighting forest fires
(10) Payments to Employees' Compensation Fund d/	(10) Forest insect and disease control
(11) Forest advanced logging and conservation e/	(11) Cooperative law enforcement
(12) Water resource development related activities b/	FOREST RESEARCH:
(13) Fighting forest fires	Forest and range management research:
(14) Insect and disease control	(12) Trees and timber management research a/
(15) Cooperative law enforcement program	(13) Forest watershed management research a/
FOREST RESEARCH:	(14) Wildlife, range, and fish habitat research a/
Forest and range management research:	(15) Forest recreation research
(16) Timber management research	Forest protection research:
(17) Watershed management research	(16) Fire and atmospheric sciences research
(18) Wildlife habitat and range research	(17) Forest insects and disease research
(19) Forest recreation research	Forest products and engineering research:
Forest protection research:	(18) Forest products utilization research
(20) Fire and atmospheric sciences research	(19) Forest engineering research
(21) Forest insect and disease research	Forest resource economics research:
Forest products and engineering research:	(20) Forest resources evaluation a/
(22) Forest products utilization research	(21) Forest economics and marketing research f/
(23) Forest engineering research	STATE AND PRIVATE FORESTRY COOPERATION:
Forest resource economics research:	(22) Cooperation in forest fire control
(24) Forest survey	(23) Cooperation in forest tree planting
(25) Forest products marketing research f/	(24) Cooperation in forest management and processing
(26) Forest economics research f/	(25) General forestry assistance b/
STATE AND PRIVATE FORESTRY COOPERATION:	
(27) Cooperation in forest fire control	

Present Structure	Proposed Structure
STATE AND PRIVATE FORESTRY COOPERATION-continued:	
(28) Cooperation in forest tree planting	
(29) Cooperation in forest management and processing	
(30) General forestry assistance	

a/ Minor changes will be made for a more descriptive and/or appropriate title.

b/ The separate activity, water resource development related activities, will be combined with National Forest protection and management, soil and water management, since it is closely related and considered as part of National Forest protection and management for management purposes. This combination would not include funds for wild and scenic river studies on State and private lands which will be transferred to State and private forestry cooperation, general forestry assistance.

c/ Minerals management will be a separate activity since it presents unique problems and is managed as a separate activity. This is an item that warrants specific consideration.

d/ The following activities will be merged into the new activity, general land management activities, in order to simplify the budget presentation. Accountability and justifications will be maintained under the new structure.

Mineral claims, leases and special uses -- all except minerals management (see c/ above)
Land classification, adjustments, and surveys
Maintenance of improvements for fire and general purposes (including communications)
Payments to Employees' Compensation Fund

e/ The activity, forest advanced logging and conservation, will be deleted as this program is not funded.

f/ The activities, forest products marketing research and forest economics research, will be combined into the new activity, forest economics and marketing research, as they are closely related.

Proposed Change in Language

Change in language is proposed as follows. New language is underscored.

For expenses necessary for forest protection and utilization, as follows:

Forest land management: For necessary expenses of the Forest Service, not otherwise provided for, including the administration, improvement, development, and management of lands, waters, or interests therein, under Forest Service administration, fighting and preventing forest fires on or threatening such lands and for liquidation of obligations .....

.....

The Forest Service has authority in substantive law to expend its appropriations for specific purposes on land in which it has obtained an interest (but less than fee title), namely: 16 USC 580g, 16 USC 571c, 7 USC 2250a, I6 USC 527, 80 Stat. 199, 16 USC 1241-1249, 16 USC 1271-1287, and various acts which established National Recreation Areas. The implied intent in these Acts is that lands in which the Forest Service has acquired a partial interest, as under a scenic easement, will be administered along with National Forest or other Federal lands in carrying out the statutory program for that area.

The appropriation language for Forest land management does not clearly make funds available for administration of land in which the Forest Service has only a partial interest and accordingly the need for this additional language is to broaden the purpose of Forest land management appropriations to encompass use on lands in which the Forest Service has established an interest.

COOPERATIVE RANGE IMPROVEMENTS

Appropriation, 1973	$700,000
Appropriation, 1974	700,000
Budget estimate, 1975	700,000

Part of the grazing fees from the National Forests, when appropriated, are used for revegetation of depleted rangelands, construction and maintenance of range improvements, rodent control, and eradication of poisonous plants and noxious weeds. These funds are advanced to and merged with the appropriation, Forest protection and utilization, subappropriation, Forest land management.

Section 12 of the Act of April 25, 1950, (Granger-Thye Act) provides that of the money received from grazing fees by the Treasury from each National Forest during each fiscal year there shall be available at the end thereof when appropriated by Congress an amount equivalent to 2 cents per animal month for sheep and goats and 10 cents per animal month for other kinds of livestock under permit on such National Forest during the calendar year in which the fiscal year begins.

Since figures for animal months permitted are not available until after more than one-half of the fiscal year for which funds are appropriated has elapsed, the 1975 appropriation request of $700,000 necessarily represents the best current approximation of the amount which will become available in the calendar year 1974 under the animal-months-permitted formula.

For calendar year 1972, the latest available figures, animal months permitted were 6,550,486 for cattle and horses, and 4,539,617 for sheep and goats. This calculates to $745,840 available under the formula.

CONSTRUCTION AND LAND ACQUISITION

Appropriation Act, 1974	$26,443,000
Budget estimate, 1975	24,147,000
Change in appropriation	-2,296,000

SUMMARY OF INCREASES AND DECREASES
(On basis of adjusted appropriation)

	1974 Estimate	1975 Estimate	Increase or Decrease		
			Pay Costs	Space Rental	Program
Forest land management construction:					
Development of recreation-public use areas--The amount of $1,902,000 is proposed as follows: $728,000 for development of Sawtooth National Recreation Area in Utah; $460,000 for facilities complementary to EO 11507 pollution abatement effort; $48,000 for General Services Administration space costs; and $666,000 for the development of facilities in critical areas of need defined in land-use plans. ...	$1,075,000	$1,902,000	$63,000	$48,000	$716,000
Water resource development construction--It is proposed to apply $2,153,000 to the construction of nondeferrable recreation facilities at reservoir projects of other agencies and to construct facilities required to protect the natural resource as result of recreation use; $52,000 will be used to pay General Services Administration for space costs.	169,000	2,205,000	35,000	52,000	1,949,000
Construction for fire, administration, and other purposes--The amount of $1,688,000 is programed to construct projects necessary to support forest land management activities; $41,000 will be used to pay General Services Administration for space costs. The program excludes minor construction costing less than $25,000 and radio replacement.	1,103,000	1,729,000	45,000	41,000	540,000

SUMMARY OF INCREASES AND DECREASES--continued
(On basis of adjusted appropriation)

	1974 Estimate	1975 Estimate	Increase or Decrease		
			Pay Costs	Space Rental	Program
Forest land management construction--continued					
Land acquisition, Weeks Act--It is proposed to use $688,720 to acquire an estimated 13,000 acres in the Redbird Purchase Unit in Eastern Kentucky; $887,280 for approximately 7,556 acres in the Eastern United States; and $2,000 for General Services Administration space costs.	$1,300,000	$1,578,000	$16,000	$2,000	$260,000
Research construction--Decrease is due to non-recurring construction projects.	5,058,000	- -	- -	- -	-5,058,000
Pollution abatement--It is proposed to use $6,671,000 for five water pollution abatement projects approved by the Office of Management and Budget for funding in 1975 under EO 11507; $9,746,000 for surveillance, monitoring and corrective action on both point and non-point discharges (PL 92-500) to meet pollution abatement standards set by States or by Federal regulatory agencies; and $316,000 for General Services Administration space costs.	17,738,000	16,733,000	713,000	316,000	-2,034,000
Total	26,443,000	24,147,000	872,000	459,000	-3,627,000

PROJECT STATEMENT
(On basis of adjusted appropriation)

Project	1973	1974 Estimate	1975 Estimate	Increase or decrease: Pay Costs	GSA Space	Program
(1) Forest land management construction:						
(a) Development of recreation-public use areas	$7,191,400	$1,075,000	$1,902,000	$63,000	$48,000	$716,000
(b) Water resource development construction	3,190,000	169,000	2,205,000	35,000	52,000	1,949,000
(c) Construction for fire, administration, and other purposes	2,328,500	1,103,000	1,729,000	45,000	41,000	540,000
(2) Research construction	5,145,000	5,058,000	- -	- -	- -	-5,058,000
(3) Pollution abatement	29,636,000	17,738,000	16,733,000	713,000	316,000	-2,034,000
(4) Land acquisition, Weeks Act	1,304,000	1,300,000	1,578,000	16,000	2,000	260,000
Total appropriation	48,794,900	26,443,000	24,147,000	872,000	459,000	-3,627,000

PROJECT STATEMENT
(On obligation basis)

Project	1973	1974 Estimate	1975 Estimate	Increase or decrease: Pay Costs	GSA Space	Program
(1) Forest land management construction:						
(a) Development of recreation-public use areas	$2,819,362	$4,771,322	$1,902,000	$63,000	$48,000	-$2,980,322
(b) Water resource development construction	1,735,250	2,123,750	2,205,000	35,000	52,000	-5,750
(c) Construction for fire, administration, and other purposes	1,685,404	2,246,596	1,729,000	45,000	41,000	-603,596
(2) Research construction	1,189,999	6,457,924	- -	- -	- -	-6,457,924
(3) Pollution abatement	20,268,614	36,358,723	16,733,000	713,000	316,000	-20,654,723
(4) Land acquisition, Weeks Act	1,543,060	1,302,956	1,578,000	16,000	2,000	257,044
Total obligations or estimate	29,241,689	53,261,271	24,147,000	872,000	459,000	-30,445,271
Unobligated balance brought forward	-7,265,060	-26,818,271	- -	- -	- -	26,818,271
Unobligated balance carried forward	26,818,271	- -	- -	- -	- -	- -
Appropriation or estimate	48,794,900	26,443,000	24,147,000	872,000	459,000	-3,627,000

CONSTRUCTION AND LAND ACQUISITION

Appropriation Act, 1973	$48,794,900
Appropriation Act, 1974	26,443,000
Budget estimate, 1975	24,147,000
Decrease	-2,296,000

A net decrease of $2,296,000 in budget authority is proposed as follows:

(1) An increase of $872,000 to provide for the pay increase effective in fiscal year 1974.

(2) An increase of $459,000 to provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313.

(3) A decrease of $3,627,000 due to non-recurring construction projects.

The program provides for the construction and improvement of buildings, utilities, other physical facilities estimated to cost more than $25,000, and land acquisition throughout the National Forests and National Grasslands. The financing for the numerous relatively minor construction projects is provided by the operating and research programs of which such minor construction items are an integral part.

(1a) Development of recreation-public use areas (An appropriation increase of $827,000 is requested. On the basis of program level there will be a decrease of $2,869,322 from the 1974 level of $4,771,322.)

The proposed program level of $1,902,000 will provide for new construction in 3 areas, completion of construction started in previous years at 2 sites, reconstruction at 31 sites, and completion of visitor information facilities previously started in 3 sites.

Projected recreation use in 1975 will reach 202.5 million visitor-days, an increase of 11 percent over 1971. The following table illustrates this increase in use and the capacity of National Forest campgrounds and picnic grounds.

Comparison of Capacity and Use Increases at Campgrounds and Picnic Grounds

	Fiscal Year				
	1971	1972	1973	1974*	1975*
Campgrounds					
Capacity (thousands of people-at-one-time)	420.0	423.0	424.4	425.7	427.5
Increase in capacity over previous year (percent)	2.2	0.7	0.3	0.3	0.4
Measured and projected increase in use over previous year (percent)	6.0	3.0	3.0	2.0	2.2
Picnic Grounds					
Capacity (thousands of people-at-one-time)	111.4	113.1	103.7	105.2	105.9
Change in capacity over previous year (percent)	-1.8	1.5	-8.3	1.4	0.7
Measured and projected increase in use over previous year (percent)	6.0	3.0	3.0	2.0	2.2

* Projected

The program includes:

Reconstruction or quality improvement which consists of replacing or upgrading worn-out, vandalized, or inadequate facilities, including water and sanitation systems, tables, stoves, traffic control structures, bathhouses, and refuse handling facilities. Increases in capacity do not normally result from this

kind of work. Benefits are derived from extending the service life of facilities, maintaining and improving the opportunity for a recreation experience, and preventing unnecessary site deterioration and degradation of the surrounding environment through pollution.

New construction results in increased capacity which will relieve some overcrowding and use at existing sites and provide facilities to accommodate increased use. It will alleviate sanitation and cleanup problems and soil and vegetation deterioration in some general forest areas.

Emphasis is being placed on completion of projects started in previous fiscal years and on rehabilitation of worn-out facilities at heavily used recreation sites. A list of proposed projects is included in Exhibit I.

Visitor Information Service facilities will be developed to meet visitor needs for orientation and environmental education dealing with natural resource management of the National Forests. Construction consists of visitor center exhibits, interpretive trails, amphitheaters, wayside exhibits and scenic overlook interpretive signs. Emphasis will continue to be placed on the development of low cost, high quality facilities and services. A list of proposed facilities is included in Exhibit I.

(1b) Water resource development construction ($2,205,000, an appropriation increase of $2,036,000. On the basis of program level there will be an increase of $81,250 from the fiscal year 1974 level of $2,123,750.)

This program level will allow construction of non-deferrable projects (facilities that should be constructed prior to impoundment of water) at 5 reservoirs constructed by other agencies and essential facilities at 8 other reservoirs. A list of proposed fiscal year 1975 projects is included in Exhibit II.

The Forest Service is responsible for designing and developing public use facilities on National Forest System lands at, and adjacent to, project reservoirs built by other agencies. Impact survey findings, recommendations, and environmental statements provide for the protection of water quality and fulfillment of other project purposes by pointing the way to carefully designed public use development tailored to individual project needs. Facilities include sanitation improvements, camping and picnic sites, swimming beaches, boat ramps, and other public use and information facilities. To serve their intended purpose, these facilities should be installed in time to meet the initial impact of visitor use when a reservoir fills. Installation during the construction period is generally less expensive than after completion of the project.

Examples of Recent Accomplishments

In National Forest developed sites, there was an increase in persons-at-one time capacity of 5,508 in fiscal year 1973. Capacity of sites developed under concession and recreation use permits also increased during fiscal year 1973 by 20,865 persons-at-one-time.

One of the more spectacular construction projects in fiscal year 1973 included Blanchard Springs Caverns in the Ozark-St. Francis National Forests in Arkansas. Facilities in the first phase of development were completed and the caverns opened for safe use by the public on July 7, 1973. From opening day to Labor Day, 2,300 persons per day viewed the visitor center and applied for a tour of the caverns. Existing tour facilities accommodated 1,800 persons per day.

Fiscal year 1974 projects include continuing construction previously started at 3 public use sites resulting in increased capacity of over 890 persons-at-one-time; construction at 16 reservoirs resulting in additional capacity for more than 3,000 persons-at-one-time; reconstruction of worn-out facilities at 8 sites--mostly water and sewer systems; and new construction at 3 sites was commenced which will eventually result in additional increased capacity for over 460 persons-at-one-time.

(1c) Construction for fire, administration, and other purposes ($1,729,000, an appropriation increase of $626,000. On the basis of program level, however, there will be a decrease of $517,596 below the fiscal year 1974 program of $2,246,596.)

Water and sanitation systems--to replace worn out, improve existing or construct 8 new systems that will comply with Federal and State water quality standards at a total cost of $309,000.

Specific project locations are as follows:

State	Location	Amount
Idaho	Coeur d'Alene NF	$40,800
Montana	Kootenai NF	26,500
California	Cleveland NF (2 projects)	81,600
California	Plumas NF	64,300
Oregon	Fremont NF	37,700
Oregon	Wallowa-Whitman NF	25,500
Oregon	Mt. Baker NF	32,600

Service and storage buildings--Two to be constructed at a cost of $160,100 at:

State	Location	Amount
Wyoming	Bridger-Teton NF	$61,200
California	Humboldt Tree Nursery	98,900

Ranger district offices--Three to be constructed at a cost of $259,300. These are new facilities needed to protect, develop and manage National Forest lands for minerals and recreation use, forage, timber and water production and for enhancement of fish and wildlife habitat at these locations:

State	Location	Amount
Montana	Clearwater NF	$61,200
New Mexico	Carson NF	91,000
California	Sequoia NF	107,100

Dwellings--Six to be constructed at a total cost of $211,600 in rural and isolated locations where rental housing is not available. They will be located as follows:

State	Location	Amount
Montana	Flathead NF (2 units)	$73,400
Montana	Beaverhead NF	31,600
Montana	Clearwater NF (2 units)	70,900
Wyoming	Bridger-Teton NF	35,700

Communications systems (radios and telephones). Five systems will be improved through new construction or upgrading existing systems at a total cost of $585,000 at the following locations:

State	Location	Amount
Arizona	Sitgreaves NF	$31,400
Wyoming	Bridger-Teton NF	108,100
California	Fire Service New System	82,600
California	Stanislaus NF (Admin. Net)	92,800
Alaska	Statewide (Second Phase)	270,100

Special project. Reconstruct the Prairie Portage Dam on Sucker Lake within the Boundary Waters Canoe Area and on the border between Minnesota (near Ely) and Ontario, Canada, at a cost of $204,000. The Office of Canadian Affairs, the State Department, Corps of Engineers and the International Joint Committee all are adamant in their desire to see the Forest Service reconstruct this badly deteriorated dam. Over the years it has become a very serious threat to downstream residents.

Examples of Recent Accomplishments

The following units were constructed or construction contracts awarded in fiscal year 1973:

Units	No.
Dwellings and barracks	3
Fire lookouts	1
Offices	1
Service and storage building	1
Purchase administrative site	1
Water and sanitation systems	14
Communication systems upgraded and modernized	6

(2) Research construction (No funds are requested, an appropriation decrease of $5,058,000.)

Decrease is due to non-recurring construction projects.

(3) Pollution abatement ($16,733,000, an appropriation decrease of $1,005,000. On the basis of program level, there will be a decrease of $19,625,723 from the 1974 level of $36,358,723.)

The decrease is due to the systematic funding and/or completion of those projects in both water and air pollution abatement which have been identified as being required for compliance with Executive Order 11507.

The funds will be used to finalize compliance with the Executive Order and to initiate action on compliance with the Federal Water Pollution Control Act Amendments of 1972 (PL 92-500).

These programs are vitally needed to protect and maintain the resources and environment of the National Forests. They will:

(a) Help prevent a general degradation of the National Forests.

(b) Insure a continued flow of high quality water for domestic and irrigation use.

(c) Help realize the 1985 National goal of elimination of the discharge of pollutants into navigable waters of the United States.

Water pollution abatement ($16,733,000, a program level decrease of $8,830,723 from the 1974 level of $25,563,723.)

An amount of $6,834,000 will be used for the construction of the following five water pollution abatement projects identified under EO 11507 and previously deferred until fiscal year 1975 in order to cooperate with local communities:

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State	Project Name	Project No.	Estimated Cost
Montana	Seeley Lake	1759	$293,000
Arizona	Oak Creek Canyon	56	1,537,000
California	Bass Lake	51	2,340,000
California	Pinecrest Summit	1021	665,000
California	Mammoth Lake	1613, 1621	1,118,100
California	Engineering, related costs of contract administration, and additional costs of installing projects started in prior fiscal years		880,900
	Total		6,834,000

An amount of $9,899,000 will be used to initiate action on compliance with PL 92-500, and related State and Federal standards promulgated by that Act. Such action will include investigation of both point and non-point discharges, including establishment of monitoring and surveillance systems and corrective action on 53 identified deficient National Forest administrative sites and approximately 17 recreation sites. Where corrective action on previously unidentified sites is found to be necessary, funds will be used for thorough analysis and preliminary design.

Proposed PL 92-500 Program

(a) Point discharge monitoring, evaluation, and design	$3,161,000
(b) Non-point monitoring, evaluation, and design	3,047,000
(c) Correct deficient administrative site	2,585,000
(d) Correct deficient recreation sites	1,106,000
Total	9,899,000

Pollution abatement and prevention requirements previously aimed largely at point source discharges have been broadened by law to include non-point or dispersed sources. The proposed program would provide for the surveillance of development and use activities on National Forest System lands. Activities or uses which have the potential for environmental pollution include such things as construction, mining, recreation, grazing, and those activities associated with timber management.

The information obtained through surveillance is used to:

(a) Help identify pollution sources.
(b) Provide the facts needed for determining:

(1) Uses for which the water is suited.
(2) When quality of water has dropped below standards for particular uses.
(3) Practical water quality goals.
(4) The effectiveness of current management practices in meeting water quality goals.
(5) Design criteria for future management action to meet established water quality goals.

Air pollution abatement (No funds are requested, a program level decrease of $10,795,000.)

The zero budget request is due to the previous systematic funding and estimated completion in fiscal year 1974 of those 120 solid waste disposal systems which were identified as being required for compliance with EO 11507.

Under the program, the Forest Service has coordinated solid waste management systems nationwide with local authorities, special use permittees, private citizens, States and other Federal agencies. Sanitary landfills have been or are being developed, equipment purchased and efficient collection routes established. Over 5,000 open, sometimes burning, dumps are in various stages of being closed. As a result, better land management and more efficient fund utilization has been and is being realized.

(4) Land acquisition, Weeks Act ($1,578,000, an appropriation increase of $278,000. On the basis of program level, an increase of $275,044 is proposed over the 1974 level of $1,302,956.)

The $1,578,000 included in the fiscal year 1975 estimate will be used to acquire an estimated 13,000 acres in the Redbird Purchase Unit in eastern Kentucky at a cost of $688,720. The remaining $881,280 will be used to continue the acquisition programs in purchase units in the eastern United States, plus a minor program in Nebraska. These funds are considered adequate to acquire properties of high priority that are expected to be available in fiscal year 1975. Emphasis is given in this part of the program to the National Forests in Arkansas, Illinois, Michigan, Missouri, and Ohio.

The acquisition of key inholdings within the National Forests and the National Forest purchase units become increasingly urgent as the demands upon wildlands and farm lands for highway construction, industrialization, and summer home development increase. The development program for the National Forests recognizes the need to acquire additional private inholdings in need of land rehabilitation. Included are lands depleted by repeated fires, poor logging practices, clearing and cultivation of steep and erodible mountain lands, disturbed mineral exploitation areas, and submarginal or marginal farms that should be removed from farming operations and managed for timber production and/or grazing. These are lands located primarily in economically depressed areas. Sound management of acquired areas will contribute to:

(a) Stabilization of the local economy.
(b) Environmental enhancement.
(c) Prevention of stream pollution in rural America.
(d) Improved timber production.

Lands primarily valuable for recreation are not included in this program, since acquisition of such lands is financed under the Land and Water Conservation Fund Act program.

See the tabulation at the end of this section for more detailed information on the actual and planned accomplishments in fiscal years 1973-1975 (Exhibit III).

Examples of Recent Accomplishments

In 1973 a total of 116 tracts were contracted for purchase under authority of the Weeks Act using regular appropriated Weeks Act funds. These cases involved the acquisition of 19,895 acres at a total cost of $1,294,672. These transactions involve lands suited to timber production and watershed protection in areas where National Forest ownership needs to be consolidated or extended to facilitate these programs. Many of the smaller parcels, 20-40-80 acres in size, are purchases made at a price equal to, or nearly equal to, the cost that would otherwise have been incurred to survey, post, and mark the National Forest boundary surrounding the property.

EXHIBIT I -- RECREATION-PUBLIC USE -- FY 1975
Capital Investments -- Distribution by National Forests

State	Forest and Project	Type of Construction	Persons-at-one-time Capacity	Water and Sewage Systems (No.)	Other Developments (No.)	Total Cost (in thousands)
Arizona	Coronado (Rucker and Riggs Flat Campgrounds)	Reconstruction of existing site	95			$31
Idaho	Sawtooth (Sawtooth NRA including Red Fish Lake facility and Glacier Campground)	"	400			218
Oregon and Washington	Mt. Hood and Wenatchee (Replace pit toilets at 11 sites)	"	1,940	11		225
Texas	NF's Texas (Double Lake Campground)	"	530	1		136
North Carolina	NF's North Carolina (Sycamore Flat Campground)	"	220	1		68
Tennessee	Cherokee (Indian Boundary Amphitheater)	"	1,725	1		5
Pennsylvania	Allegheny (Twin Lakes Dam repair)	"	1,400		1	58
Michigan	Huron-Manistee (Walkways, improvements for soil-vegetative rehabilitation at 4 sites)	"	400		4	65
New Hampshire	White Mountain (Betterment at 10 sites)	"	300			60
Subtotal, reconstruction of existing facilities			7,010	14	5	866
Idaho	Sawtooth (Sawtooth NRA--Recreation Headquarters and Warehouse)	New (completion)		1	1	510
Wyoming	Teton (Jackson Hole visitor information center -- cooperative project)	"	200			35
California	Sequoia (Princess Campground)	" (continuation of project previously started)	495			134
Georgia	Chattahoochee (Brasstown Bald visitor information center exhibits)	New (completion)	800		1	173
West Virginia	Monongahela (Spruce Knob-Seneca Rocks NRA--visitor information center exhibits)	"	85			128
Michigan	Ottawa (Black River Harbor)	New - complete removal of reef in harbor which results in extensive drainage to government facilities			1	32
Wisconsin	Chequamegon (Day Lake picnic ground)	New (completion)	60			14
Alaska	Region-wide (Interpretive facilities)	New	100			10
Subtotal, new construction			1,740	1	3	1,036
Grand total			8,750	15	8	1,902

EXHIBIT II -- WATER RESOURCE DEVELOPMENT CONSTRUCTION -- FY 1975
Capital Investments -- Distribution by National Forests

State	Forest and Project	Construction	Persons-at-one-time Capacity	Water and Sewage Systems (No.)	Other Developments (No.)	Total Cost (in thousands)
Montana	Kootenai (Libby Reservoir, McGilliorary recreation area, beach and boat ramp)	New - continuation	(200)*			$77
Colorado	Pike (Rampart Reservoir boat ramp and overlook)	New	135		1	106
Colorado	San Isabel (Turquoise Reservoir Campground)	New - continuation	(395)*			130
Utah-Wyoming	Ashley (Flaming Gorge NRA - Firehole complex, Cedar Springs Campground)	New and reconstruction	(500)*	1	1	153
California	Tahoe (Stampede Reservoir, Tomson and Loggers Campgrounds)	New	900	1		603
Washington	Olympic (Wynoochee Reservoir, Coho Campground)	New - continuation	(345)*	1	1	196
Kentucky	Daniel Boone (Cave Run Reservoir, Twin Knobs Recreation Site and Campground and sanistation)	"	(200)*		1	269
Kentucky	Daniel Boone (Laurel River Reservoir boat ramps)	"	(395)*		3	184
Tennessee	Cherokee (Boat ramp, power to Little Oak Campground)	"	570		2	84
Texas	NF's Texas (Toledo Bend Reservoir, Ragtown Campground)	"	(800)*	1		100
Texas	NF's Texas (Lake Conroe, boat ramp and toilets)	"	(100)*	1	1	75
Indiana	Wayne-Hoosier (Lake Celine boat ramp and campground)	New	300			56
Pennsylvania	Allegheny (Allegheny Reservoir, Tracy Ridge picnic ground - water and sewage lagoon, power	New - continuation and completion	(600)*	1	1	172
Total			1,905	6	11	2,205

* Reported in previous years (3,535).

EXHIBIT III -- WEEKS ACT PURCHASES 1973-1975

	FY 1973 Actual			FY 1974 Estimated			FY 1975 Estimated		
	Options accepted	Acres	Obligation	Options to be accepted	Acres	Obligation	Options to be accepted	Acres	Obligation
Alabama - Talladega	1	200	$22,020						
Arkansas - Ozark	11	1,018	83,183	11	844	$99,000	9	700	$70,000
St. Francis	1	105	23,100						
Illinois - Shawnee	6	485	68,939	10	525	75,000	15	770	100,000
Indiana - Hoosier	15	1,408	162,355	5	550	63,000	15	1,200	138,000
Kentucky - Redbird Purchase Unit	41	13,527	685,540	40	10,304	525,500	45	13,000	688,720
Michigan - Hiawatha	3	280	19,800	2	210	10,000	2	210	10,000
Huron-Manistee	8	203	30,775	10	500	40,000	10	500	40,000
Ottawa	1	40	1,000	5	200	10,000	2	200	10,000
Minnesota - Chippewa	1	37	1,000	5	200	10,000	5	200	10,000
Missouri - Clark	3	360	25,000	12	986	69,000	12	986	69,000
Mark Twain	5	765	41,346	5	325	30,000	5	325	30,000
Nebraska - Nebraska	2	440	35,200	1	220	19,000	1	220	19,000
Ohio - Wayne	10	593	38,912	10	720	54,000	10	720	54,000
Tennessee - Cherokee	3	34	3,564						
Vermont - Green Mountain	1	75	18,075						
Virginia - George Washington				1	45	6,700			
Jefferson				1	56	2,800			
West Virginia - Monongahela	1	205	26,663	1	325	37,500			
Wisconsin - Chequamegon							2	325	$37,500
Nicolet	3	120	$8,200	8	1,200	$48,500	8	1,200	48,500
Subtotal	116	19,895	1,294,672	127	17,210	1,100,000	141	20,556	1,324,720
Surveys and related acquisition costs			248,388			202,956			253,280
Unobligated balance carried forward			2,956						
Unobligated balance brought forward			-242,016			-2,956			
Total appropriation			1,304,000			1,300,000			1,578,000

CONSTRUCTION AND LAND ACQUISITION

Proposed Change in Language

Change in language is proposed as follows. New language is underscored.

> For construction ..... and utilization of national forest resources; point discharge monitoring and evaluation; and non-point discharge surveillance monitoring and evaluation; and the acquisition .....

The Forest Service is authorized and directed to develop and administer the renewal resources of the National Forests (Organic Administration Act of 1897, 16 USC 475, and the Multiple Use-Sustained Yield Act of 1960, 16 USC 528-531).

Public Law 92-500 of October 18, 1972 (86 Stat. 816) amended the Federal Water Pollution Control Act. This law makes pollution abatement a continuing program of surveillance, monitoring and corrective action on both point and non-point discharges. The standards set by the States in response to the various legislation, or by the Federal regulatory agencies where States have not set standards, must be met or facilities closed.

The Forest Service has over 15,000 public use and administrative areas in 40 States. Sixteen hundred of the sites were inventoried and about 300 construction projects will be completed under E.O. 11507. Under PL 92-500 the areas must be managed in a manner to insure that the point discharged pollutants, after treatment, will not contribute to tne degradation of the receiving water below the standards established for that water.

Also, Forest Service activities relating to resource development use, and protection involves many sources of pollution potentials from non-point source such as timber activities, construction activities, range, and wildlife activities which involve runoff over disturbed areas, silt movement, pesticide use, etc. The administration of the provisions of Public Law 92-500 will be enhanced if funds for the monitoring, surveillance, and related operating activities are provided in the same appropriation as the required construction.

The above addition to the language will permit the Forest Service to accomplish all the activity necessary to comply with PL 92-500 under a single appropriation activity.

FOREST ROADS AND TRAILS

Appropriation Act, 1973	$158,840,000
Appropriation Act, 1974	98,200,000
Budget estimate, 1975	121,000,000
Increase	+22,800,000

PROJECT STATEMENT

The following tabulation reflects the total program for the construction and maintenance of roads and trails on the National Forests and Grasslands by combining the funds available under the appropriation "Forest roads and trails" with the permanent appropriation of 10 percent of National Forest receipts.

Project	1973	1974 estimate	1975 estimate	Increase or decrease
1. Construction of roads and trails	$112,688,147	$92,546,000	$107,802,000	$15,256,000
2. Maintenance of roads and trails	44,804,355	37,669,000	39,145,000	1,476,000
Total obligations	157,492,502	130,215,000	146,947,000	16,732,000
Transfer from Roads and Trails for States a/	-33,871,106	-45,468,547	-40,500,000	4,968,547
Program under Forest Roads and Trails contract authority	123,621,396	84,746,453	106,447,000	21,700,547
Obligations incurred under unfunded contract authority	35,218,604	13,453,547	14,553,000	1,099,453
Appropriation or estimate	158,840,000	98,200,000	121,000,000	22,800,000

a/ The annual appropriation language and the Department presentation combine the appropriation for Forest roads and trails made pursuant to 23 USC 205 and the appropriation of 10 percent of forest receipts for construction and maintenance of roads and trails pursuant to 16 USC 501. This merger of funds is made in order to simplify the programing, allotment, and accounting of funds at the field level.

An increase of $22,800,000 is proposed to meet cash requirements for liquidation of contract authority. This appropriation provides for the liquidation of obligations incurred for the construction and maintenance of forest roads and trails pursuant to the authority contained in the Federal-Aid Highway Act. An appropriation of $121 million for 1975 is required to:

(1) Pay for obligations of the prior years which will be due for payment in fiscal year 1975.

(2) Pay the portion of the 1975 obligations of $106.4 million contract authority which will require cash payment in that year.

Following is a summary of three years of road and trail construction and maintenance. A comparison is shown of the work to be undertaken in fiscal year 1975 as compared to fiscal year 1974 (dollars are in thousands).

	FY 1973		FY 1974		FY 1975		FY 1974-1975 Change			
	Miles	Amount	Miles	Amount	Miles	Amount	Miles	Pay Costs	Space Costs	Program
Recurrent road maintenance	96,598	$38,050	91,818	$32,417	82,422	$33,686	-9,396	$269	$1,000	
Recurrent trail maintenance	51,802	6,755	29,656	5,252	39,403	5,459	9,747	42	165	
Road construction	527	59,799		8,115		8,378		58	205	
Trail construction	858	3,105	250	3,040	330	3,135	80	15	80	
Location, surveys, plans and supervision (timber purchaser roads)	3,678	39,629	7,080	70,953	8,000	81,631	920	671	1,996	$8,011
Supplementing timber purchaser construction ..	660	9,955	300	8,438	350	8,684	50	41	205	
Bridge construction and reconstruction for timber access			20	2,000	153	5,974	133	155	154	3,665
Road purchase		200								
Totals		157,493		130,215		146,947		1,251	3,805	11,676

The $16,732,000 program increase will provide for the Forest Service to handle the engineering road survey work on at least 75 percent of the total volume of timber scheduled for sale in fiscal year 1975 and to retain control of the location and design work on permanent roads. The increase will also fund access bridge construction to support the timber program. The mileage of timber purchaser road construction and reconstruction will be increased by 920 miles in fiscal year 1975.

Emphasis on support activities for the timber purchaser road program, rather than direct Federal construction, will continue in fiscal year 1975. This will help to meet the challenge of increasing timber needs and will assist in maintaining Federal outlays at a reduced level.

The proposed program provides for maintenance and environmental protection of essential roads and trails on the existing transportation system. Some lightly used roads will be closed to traffic between entries for management purposes, and to minimize outlays and to prevent resource damage.

Requested road supplemental funds will be used to construct environmentally sound timber roads for access to new timber sale opportunities in areas of steep slopes, critical soils, sensitive watersheds and timber stands needing immediate thinning or salvage.

National Trail System development authorized by PL 90-543 will be implemented under the proposed funding. This will assist in providing for the present heavy public travel over inadequate and unsafe, heavy use trails in some areas of the National Forests. Top priority will be given to construction of the Pacific Crest and Appalachian National Scenic Trails, next priority will be given to National Recreation trail candidates, and then priority to construction of heavy use trails not part of the National Trail System. This program will provide for safe use of many identified heavy used trails while protecting soil and watershed and esthetic values in scenic and recreation areas.

The planned maintenance, construction, and engineering services will be in accord with the National Environmental Policy Act (NEPA). This Act requires full consideration of the services to, and the effect upon, all resources by development of roads, trails, and other facilities. All alternate means of access must be investigated and their desirability, feasibility, and impacts carefully weighed before a decision to construct is made. This continues to increase costs due to extending the time between project conception and completion and it requires extensive analysis and review during the planning process with full utilization of technical expertise.

The work will be designed, and facilities constructed and administered, under provisions of the Highway Safety Act that made all Highway Safety Standards effective February 15, 1973 (23 CFR II). This requires implementation of traffic engineering services and techniques, including traffic control devices, seasonal closure, and other management techniques for roads to insure public safety.

The proposed program provides for continuing implementation of the bridge standards under the Federal-Aid Highway Act of 1968. Implementation of the Act involves aggressively continuing corrective actions on those fatigued and otherwise defective bridges. This results in added costs for maintenance, reconstruction, or in closure and rerouting over longer routes of access to assure public safety.

The following tabulation shows the current status of the forest roads and trails system and projected needs:

	Existing Mileage	Estimated Mileage Needing Reconstruction	Estimated Additional Mileage Needed
Forest development roads ..	201,317	141,827	135,840
Forest development trails .	96,393	47,577	23,895

Construction

	By the Government			By Timber Purchaser		
	FY 1973	FY 1974	FY 1975	FY 1973	FY 1974	FY 1975
Roads (miles)	527	- -	- -	6,727	7,080	8,000
Trails (miles)	858	250	250	- -	- -	- -

Status of Unfunded Authorizations

Unfunded contract authority beginning of 1974	$327,256,000
Federal-Aid Highway Act of 1973 (1974 and 1975 authority available in 1974)	280,000,000
Appropriation, 1974	-98,200,000
Unfunded contract authority lapsing	-24,637,000
Total unfunded beginning of 1975	484,419,000
Federal-Aid Highway Act of 1973 (1976 authority available in 1975)	140,000,000
1975 Budget estimate (cash requirements)	-121,000,000
Balance to remain unfunded as of June 30, 1975	503,419,000

Analysis of Cash Requirements

1.	Unliquidated obligations, June 30, 1973		$76,301,267
2.	Estimated cash requirements to finance 1974 program		50,326,905
3.	Total cash requirements by June 30, 1974		126,628,172
4.	Less cash on hand 1973: Balance from 1973 .... 28,428,172 Appropriation, 1974 .. 98,200,000		126,628,172
5.	Obligations in 1974 and prior years for which cash was not provided in items 1 and 2		33,000,000
6.	Estimated cash required to finance 1975 program	a/	83,000,000
7.	Reserve		5,000,000
8.	Total cash required in 1975		121,000,000

a/ An estimated 78 percent of the $106,447,000 new obligations will require cash payments during the fiscal year.

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS

Forest Roads and Trails

	FY 1973	FY 1974	FY 1975
Alabama	$730,990	$700,000	$789,800
Alaska	3,413,429	4,992,700	5,634,200
Arizona	3,681,107	3,502,300	3,952,200
Arkansas	1,806,171	1,602,900	1,808,800
California	30,335,779	29,132,900	32,876,900
Colorado	6,771,024	5,312,700	5,995,300
District of Columbia	3,142,434	3,099,200	3,497,500
Florida	768,218	619,300	698,700
Georgia	932,914	781,800	882,200
Idaho	15,172,299	12,956,400	14,621,300
Illinois	258,180	180,300	203,400
Indiana	179,856	41,100	46,400
Kansas	1,247	5,200	5,800
Kentucky	761,257	467,800	527,900
Louisiana	1,001,030	976,500	1,102,100
Maine	92,759	32,400	36,600
Michigan	2,530,474	1,250,000	1,410,500
Minnesota	2,095,369	1,202,200	1,356,600
Mississippi	911,964	1,307,100	1,475,000
Missouri	680,673	423,500	478,000
Montana	12,803,967	9,920,400	11,195,200
Nebraska	104,032	47,200	53,300
Nevada	745,790	737,000	831,800
New Hampshire	774,153	374,800	423,000
New Mexico	4,579,872	2,601,200	2,935,600
New York	3,297	4,300	4,800
North Carolina	954,271	989,400	1,116,600
North Dakota	12,692	15,700	17,800
Ohio	92,652	28,900	32,600
Oklahoma	144,451	85,400	96,400
Oregon	32,534,267	22,694,200	25,610,200
Pennsylvania	927,880	595,700	672,200
Puerto Rico	139,971	26,500	29,900
South Carolina	793,893	713,800	805,500
South Dakota	1,484,605	1,933,100	2,181,400
Tennessee	803,310	661,100	746,100
Texas	960,579	854,100	963,800
Utah	2,832,966	2,430,000	2,742,200
Vermont	467,841	336,200	379,500
Virginia	1,179,608	958,600	1,081,700
Washington	13,743,118	10,242,200	11,558,300
West Virginia	1,050,895	1,338,500	1,510,400
Wisconsin	1,443,613	744,600	840,300
Wyoming	3,647,605	3,295,800	3,719,200
Total	157,492,502	130,215,000	146,947,000

ACQUISITION OF LANDS FOR NATIONAL FORESTS, SPECIAL ACTS

Appropriation Act, 1973	$80,000
Appropriation Act, 1974	94,000
Budget estimate, 1975	161,000
Increase	+67,000

PROJECT STATEMENT

Project	1973	1974 estimate	1975 estimate	Increase or decrease
1. Cache National Forest, Utah, Act of 5/11/38, as amended	$50	$20,000	$20,000	- -
2. Uinta-Wasatch National Forests, Utah, Act of 8/26/35, as amended	20,000	20,000	30,000	$10,000
3. Toiyabe National Forest, Nevada, Act of 6/25/38, as amended	8,000	8,000	10,000	2,000
4. Angeles National Forest, California, Act of 6/11/40	30,000	14,000	20,000	6,000
5. San Bernardino and Cleveland National Forests, California, Act of 6/15/38	- -	32,000	81,000	49,000
Unobligated balance reverted to National Forests Fund	21,950	- -	- -	- -
Appropriation or estimate	80,000	94,000	161,000	67,000

The Congress has enacted several special laws which authorize appropriation from the receipts of specified National Forests for the purchase of lands to minimize erosion and flood damage. Amounts appropriated and laws under which authorized are shown above.

These are critical watershed lands needing soil stabilization and vegetative cover restoration to prevent serious erosion and damaging floods within these National Forests. Land treatment measures must be applied and subsequently maintained on all lands in these areas to make corrective action fully effective. To assure full program effectiveness, the intermingled private lands must be acquired by the Federal Government. The results will be reflected in improved watershed conditions, social benefits, and development of economic strength in local communities.

Cache National Forest. In fiscal year 1973, funds were available from two sources for the purchase of lands within the Cache National Forest in Utah.

1. The Receipts Act of May 11, 1938, as amended -- $20,000. This is an annual appropriation.

2. The Act of July 24, 1956 -- $200,000 was appropriated under this authority in fiscal years 1957 through 1960. These funds remain available until expended. Through fiscal year 1973, $189,351 has been obligated from this appropriation.

These funds are used to acquire key tracts of land in the steep, rough, and highly important watershed areas lying north of the Ogden River along the Wasatch front and on Wellesville Mountain of the Cache National Forest. These are rugged mountain lands above the river valley which have been damaged and their watershed functions impaired through forest fires or overgrazing. This contributes to excessive rainfall runoff causing severe erosion. The damaged watershed lands are potential sources of floods and mudrock flows. Many tracts of land are located in

the north fork of Ogden River and on the drainage of Pineview Reservoir, a Federal reclamation project. Others are within the watersheds of the city of Ogden and the other small towns along the Wasatch front. Public ownership of these lands and subsequent restoration and protection of their vegetative cover is a highly important part of a vigorous cooperative program with the local community and agencies.

The appropriation of $20,000 under the Act of May 11, 1938, is from receipts of the Cache National Forest. In the absence of this appropriation, the State of Utah would receive 25 percent of these receipts for roads and school purposes in the local counties involved. Therefore, the local counties, in effect, are contributing one-fourth of the amount of this appropriation. These appropriations are extremely important to the continuation of a vital and worthwhile program extending almost thirty years and shared in by both the local agencies and the Federal Government through the National Forests.

The 1956 Act requires that expenditures of Federal funds be matched by contributions by local agencies or people. This requirement has been met through donations of money and lands valued at $200,000.

Through fiscal year 1973, 29,352 acres have been approved for purchase pursuant to the Receipts Act of 1938, and 15,957 acres under the Special Act of 1956. The 1974 objective is to acquire 840 additional acres of these critical watershed lands. A similar acreage is expected to be acquired in 1975.

Uinta-Wasatch. In fiscal years 1963 through 1973, an appropriation of $220,000 was made under the Uinta-Wasatch Receipts Act of August 26, 1935, for acquiring critical watershed lands in the American Fork Canyon watershed. A total of 2,881 acres has been approved for purchase through fiscal year 1973, and an estimated 100 acres will be acquired each year during 1974 and 1975.

Toiyabe National Forest. $8,000 was appropriated under this Act in each of fiscal years 1973 and 1974. The 1974 and 1975 objective is to acquire 40 acres each year.

Angeles National Forest. $32,000 was appropriated in fiscal year 1973, $14,000 in 1974, and $20,000 is proposed in 1975 to purchase important watershed lands. Acquisition is needed to minimize erosion and flood damage. The 1974 objective is to acquire 30 acres. The 1975 objective is to acquire 80 acres.

San Bernardino and Cleveland National Forests. The $81,000 proposed for fiscal year 1975 is to acquire 90 acres of important watershed lands. Acquisition is needed to minimize erosion and flood damage.

ACQUISITION OF LANDS TO COMPLETE LAND EXCHANGES

Appropriation, 1973	- -
Appropriation, 1974	$55,300
Budget estimate, 1975	39,310
Decrease	-15,990

PROJECT STATEMENT

Project	1973	1974 estimate	1975 estimate	Increase or decrease
Purchase of land, State of:				
California	- -	$54,585	$18,560	-$36,025
Montana	- -	750	- -	-750
Georgia	- -	- -	16,250	16,250
Oklahoma	- -	- -	4,500	4,500
Unobligated balance brought forward	-35	-35	- -	35
Unobligated balance carried forward	35	- -	- -	- -
Appropriation or estimate	- -	55,300	39,310	-15,990

It is estimated that 153 acres of land will be acquired in fiscal year 1974 and 130 acres in fiscal year 1975.

ASSISTANCE TO STATES FOR TREE PLANTING

Appropriation Act, 1973	$1,020,000
Appropriation Act, 1974	1,013,000
Budget estimate, 1975	1,346,000
Increase	+333,000

PROJECT STATEMENT

Project	1973	1974 estimate	1975 estimate	Increase or decrease
Assistance to States for tree planting	$1,024,213	$1,122,618	$1,346,000	$223,382
Unobligated balance brought forward	-113,831	-109,618	- -	109,618
Unobligated balance carried forward	109,618	- -	- -	- -
Appropriation or estimate	1,020,000	1,013,000	1,346,000	333,000

An increase of $333,000 is proposed as follows:

(1) $292,000 to establish superior tree seed orchards; to accelerate progeny testing to determine which parents produce progeny with superior traits such as fast growth and disease resistance; and to improve orchard management. Selected trees will be cultured to produce genetically superior seed and to provide material for development of second generation orchards.

(2) $18,000 to provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313.

(3) $23,000 to provide for increased pay costs effective in fiscal year 1974.

The program authorized under Section 401 of the Agricultural Act of 1956 (16 USC 568e) provides assistance to States in their forestation and tree improvement projects. Needed rehabilitation on State and county forest lands has resulted from this program.

New and expanded tree improvement projects which are partially or totally funded under this program are underway in 41 States. Nationally, the States expend three times more than they receive under this program for tree improvement.

Assistance will emphasize seed orchard establishment aimed at the production of improved genetic quality tree seed. Reforestation work will be carried out to restore low-yielding or non-productive forest lands to fuller production of commercial wood. In addition, attending benefits include:

(1) Erosion control.
(2) Wildlife habitat improvement.
(3) Expanded recreational land use potentials.
(4) Environmental enhancement.

Examples of Recent Accomplishments

Seedlings from genetically improved seed planted. In the State of Georgia in fiscal year 1973, 17.5 million improved slash pine seedlings and 16 million improved loblolly pine seedlings were sold to private landowners. Based on early results of progeny tests, a minimum of 15 percent increase in yield can be expected due to the genetically improved seedlings. The improved seedlings were planted on approximately 45,000 acres. Within 20 years about 200,000 more cords on these acres can be expected than if regular run of the woods seedlings had been planted.

Genetically superior cottonwood ready for commercial planting. Cuttings of genetically superior cottonwood trees have been made available to nurseries for production of cutting for commercial planting on private forest lands. Enough superior cuttings will be produced during the 1973-74 planting season to plant about 14,000 acres in the lower Mississippi Valley.

Propagation of superior trees advanced. A significant new development with far-reaching implications has resulted from a Kansas project. In a search for improved means to produce genetic duplicates of selected superior black walnut specimens, a system for rooting cuttings was perfected. This technique, now available to tree improvement specialists throughout the country, is being used to establish new superior selections in walnut seed orchards and appears promising for other species. Kansas State is in the process of constructing a greenhouse complex for producing tree seedlings. Utilization of the newly developed techniques will enable mass production of genetically superior seedlings for planting.

Improved Japanese larch seed harvested. The New Jersey Bureau of Forestry has grown their first crop of improved Japanese larch seedlings. Seed for these seedlings came from New Jersey's 9-year-old genetically improved Japanese larch seed orchard which contains clones representing 25 different superior trees. New Jersey landowners can expect to market piling from these plantations for coastal houses by 1990. By the turn of the century, these trees should be large enough for sawtimber.

GEOGRAPHIC BREAKDOWN OF APPROPRIATION

Assistance to States for Tree Planting

	1973 (actual)	1974 (estimate)	1975 (estimate)
Alabama	$22,000	$24,000	$65,000
Arkansas	10,000	10,000	15,000
California	18,000	18,000	23,000
Colorado	5,000	5,000	10,000
Connecticut	4,000	4,000	8,000
Florida	30,000	30,000	39,000
Georgia	20,000	20,000	53,000
Hawaii	35,000	35,000	38,000
Idaho	10,000	10,000	16,000
Illinois	8,000	8,000	10,000
Indiana	12,500	12,500	12,000
Iowa	7,000	7,000	6,000
Kansas	10,000	12,000	19,000
Kentucky	12,000	12,000	17,000
Louisiana	16,500	16,500	42,000
Maine	15,000	15,000	5,000
Maryland	5,000	5,000	20,000
Michigan	30,000	30,000	12,000
Minnesota	73,000	50,000	18,000
Mississippi	12,000	14,500	41,000
Missouri	28,000	28,000	35,000
Montana	14,000	14,000	15,000
Nebraska		5,000	5,000
New Hampshire	10,000	10,000	5,000
New Jersey	12,000	12,000	6,000
New York	30,000	30,000	15,000
North Carolina	13,000	14,000	54,000
Ohio	14,000	14,000	10,000
Oklahoma	10,000	10,000	16,000
Oregon	78,000	60,000	46,000
Pennsylvania	29,000	29,000	38,000
South Carolina	22,000	22,000	28,000
Tennessee	11,500	14,000	33,000
Texas	15,000	15,000	56,000
Vermont	5,500	5,500	6,000
Virginia	23,000	23,000	57,000
Washington	76,000	60,000	50,000
West Virginia	10,000	10,000	5,000
Wisconsin	20,000	20,000	12,000
Wyoming	10,000	10,000	10,000
Special projects		2,000	41,900
Total to States	786,000	746,000	1,012,900
Forest Service administration and technical assistance	234,000	267,000	333,100
Total	1,020,000	1,013,000	1,346,000

CONSTRUCTION AND OPERATION OF RECREATION FACILITIES

Appropriation, 1973	- -
Appropriation, 1974	$3,277,837
Budget estimate, 1975	1,260,000
Decrease	-2,017,837

PROJECT STATEMENT

Project	1973	1974 estimate	1975 estimate	Increase or decrease
Construction and operation of recreation facilities ..	- -	$3,277,837	$1,260,000	-$2,017,837

These are funds proposed for appropriation from admission and user fees collected under the Land and Water Conservation Fund Act of 1965, as amended (78 Stat. 897; 16 USC 4601-5; PL 93-81, 8/1/73).

They will be used:

(1) To bring facilities on National Forest lands to an acceptable standard of repair for visitor use, safety, and resource protection.

(2) For increased efforts in law and regulation enforcement to assure visitor safety and to reduce the vandalism which causes more than $2 million damage annually.

Public Law 92-347, approved July 11, 1972, amended the Land and Water Conservation Fund Act of 1965 to provide that the Forest Service (and other bureaus) may collect recreation admission fees at designated National Recreation Areas and "special recreation use fees for the use of sites, facilities, equipment, or services furnished at Federal expense." After distribution to the States and Counties and Roads and Trails for States appropriation as required under the Acts of 5/23/08, 7/22/37, and 3/14/13, the remaining fees (65 percent of total collected) are to be deposited into a "special account in the Treasury of the United States to be administered in conjunction with, but separate from, the revenues in the Land and Water Conservation Fund. Revenues in the special account shall be available for appropriation without prejudice to appropriations from other sources for the same purposes, for any authorized outdoor recreation function of the agency by which the fees were collected."

Public Law 93-81 further amended the Land and Water Conservation Fund Act of 1965 by limiting the charging of special user fees to sites containing specified facilities. As a result, the number of charge sites on National Forest lands was reduced from 2,235 to 37. A corresponding decrease in receipts followed.

The 1975 estimate includes receipts from July 1 to July 31, 1973, under the provisions of Public Law 92-347, as well as estimated receipts to be collected during the remainder of fiscal year 1974 under Public Law 93-81.

YOUTH CONSERVATION CORPS

NOTE: For budgetary purposes, the entire appropriation is shown under the Forest Service. However, one-half of the appropriation each year is transferred to the Department of the Interior.

Appropriation Act, 1973	$3,500,000
Appropriation Act, 1974	10,000,000
Budget estimate, 1975	10,240,000
Increase	+240,000

PROJECT STATEMENT

Project	1973	1974 estimate	1975 estimate	Increase or decrease
Youth Conservation Corps	$3,490,998	$8,999,000	$10,180,000	$1,181,000
Unobligated balance brought forward	-2,097,381	-2,106,383	-3,107,383	-1,001,000
Unobligated balance carried forward	2,106,383	3,107,383	3,167,383	60,000
Appropriation or estimate 1/	3,500,000	10,000,000	10,240,000 2/	240,000

1/ Includes allocation to Department of the Interior: 1973, $1,750,000; 1974, $5,000,000; and 1974, $5,120,000.

2/ Additional authorizing legislation proposed.

An increase of $240,000 is proposed as follows:

(1) To provide for increased pay costs effective in fiscal year 1974, $220,000.

(2) To provide for payment to General Services Administration the cost of space rental in accordance with PL 92-313, $20,000.

The Act of August 13, 1970 (84 Stat. 794), as amended by Public Law 92-597, authorizes continuation of the Youth Conservation Corps Program on Federal lands, and establishes a pilot grant program to assist States in establishing YCC projects on non-Federal public lands. In awarding grants to States, preference will be given to States with fewer Federal lands assuming competing applications are otherwise comparable. Preference will also be given to State applications where no more than 50 percent of the cost of a pilot project is to be financed by Federal grant. The Department of the Interior and Agriculture share the program equally.

The primary purposes of the program are to:

(1) Provide gainful employment to 15 through 18 year old youths representing all segments of society.

(2) Further development and maintenance of the natural resources of the United States by the youth, upon whom will fall the ultimate responsibility for maintaining and managing these resources for the American people.

(3) Develop an understanding and appreciation in Corps participants of the Nation's natural environment and heritage.

This integrated conservation work, learn, and employment program is designed to accomplish needed conservation work, provide employment and income to youth, teach proper work habits, encourage greater appreciation of the management of natural resources, and increase individual pride and dignity. Conservation work-learn projects on public lands include recreation facilities maintenance and construction, range and wildlife habitat improvement, timber stand improvement, trail improvement

and construction, and visitor information services. Recruiting guidelines have been established to meet the mandate of the Congress that there be a representative mix of youth from all economic, social, and racial backgrounds.

Evaluation of the Federal pilot YCC programs in 1971, 1972, and 1973 by Department personnel and the University of Michigan's Institute for Social Research indicates that the purposes of the Act were achieved. With $3.5 million provided for the 1973 summer program, the 3,513 young men and women employed accomplished conservation work appraised at a value of over $2 million. Only two percent of the youth were unable to complete the summer program. Environmental education showed significant gains.

ACQUISITION OF LANDS FOR UINTA NATIONAL FOREST

PROJECT STATEMENT

Project	1973	1974 estimate	1975 estimate	Increase or decrease
Acquisition of lands for Uinta National Forest	$1,570	$95,089	- -	-$95,089
Unobligated balance brought forward	-96,659	-95,089	- -	95,089
Unobligated balance carried forward	95,089	- -	- -	- -
Appropriation or estimate	- -	- -	- -	- -

Public Law 89-226 authorized the purchase of approximately 10,000 acres of non-Federally owned land within a described part of the Uinta National Forest in Utah for the purpose of promoting the control of floods and the reduction of soil erosion through restoration of adequate vegetative cover. $300,000 were appropriated in fiscal year 1967.

As of June 30, 1973, 8,847 acres have been acquired at a cost of $204,911.

ACQUISITION OF LANDS FOR WASATCH NATIONAL FOREST

PROJECT STATEMENT

Project	1973	1974 estimate	1975 estimate	Increase or decrease
Acquisition of lands for Wasatch National Forest	$1,284	$236,259	- -	-$236,259
Unobligated balance brought forward	-52,593	236,259	- -	236,259
Unobligated balance carried forward	236,259	- -	- -	- -
Recovery of prior year obligations	-184,950	- -	- -	- -
Appropriation or estimate	- -	- -	- -	- -

The Act of September 14, 1962 (PL 87-661) provided authorization for the appropriation of $400,000 for purchase of privately owned lands within the Wasatch National Forest in Utah to aid in control of floods and to reduce soil erosion. The full amount of this authorization has been appropriated with the funds remaining available until expended.

As of June 30, 1973, approximately 12,741 acres had been approved for purchase under this authority.

ACQUISITION OF LANDS FOR SUPERIOR NATIONAL FOREST

PROJECT STATEMENT

Project	1973	1974 estimate	1975 estimate	Increase or decrease
Acquisition of lands for Superior National Forest	$4,919	$271	- -	-$271
Unobligated balance brought forward	-5,190	-271	- -	271
Unobligated balance carried forward	271	- -	- -	- -
Appropriation or estimate	- -	- -	- -	- -

The Act of June 22, 1948 (PL 80-733) as amended, provided authorization for the appropriation of $4.5 million for the purchase of lands and improvements thereon in the Boundary Waters Canoe Area, Superior National Forest, Minnesota. The full amount of this authorization has been appropriated.

ACQUISITION OF LANDS FOR CACHE NATIONAL FOREST

PROJECT STATEMENT

Project	1973	1974 estimate	1975 estimate	Increase or decrease
Acquisition of lands for Cache National Forest	$132	$10,649	- -	-$10,649
Unobligated balance brought forward	-10,781	-10,649	- -	10,649
Unobligated balance carried forward	10,649	- -	- -	- -
Appropriation or estimate	- -	- -	- -	- -

The 1956 Appropriation Act provided $200,000 for the acquisition of lands in the Cache National Forest pursuant to the Act of July 24, 1956 (70 Stat. 632). Obligations under this fund are in addition to the appropriation from National Forest receipts authorized by the Act of May 11, 1938, and provided in the appropriation, Acquisition of Lands for National Forests, Special Acts. Under the 1956 Act, funds appropriated must be matched by contribution of funds or land by local agencies or persons. Explanation of this program and the accomplishments thereunder are included under the appropriation, Acquisition of lands for national forests, special acts.

ADMINISTRATIVE PROVISIONS

Proposed Changes in Language

Changes in language are proposed as follows. New language is underscored and deleted matter is enclosed in brackets.

Appropriations to the Forest Service for the current fiscal year shall be available for: (a) purchase of not to exceed three hundred [eight] thirty-three passenger motor vehicles of which two hundred sixty-[two] seven shall be for replacement only, ... (g) expenses incident to acquisition by donation or exchange of land, waters, or interests in land or waters, pursuant to the Act of August 3, 1956 (7 U.S.C. 428a): Provided, That such appropriation shall not be available for expenses incident to donations and exchanges which can be made pursuant to authorities other than the Act of August 3, 1956 (7 U.S.C. 428a); and (h) not to exceed .....

.....

5 [None of the funds made available under this Act shall be obligated or expended to change the boundaries of any region, to abolish any region, to move or close any regional office for research, State and private forestry, and National Forest System administration of the Forest Service, Department of Agriculture, without the consent of the Committee on Appropriations and Committee on Agriculture and Forestry in the U. S. Senate and U. S. House of Representatives.]

Changes 1 and 2 would provide authority to purchase 333 passenger motor vehicles of which 267 will be replacements.

PASSENGER CARRYING VEHICLES

Replacements

During fiscal year 1975, it is proposed that the Forest Service replace 267 passenger carrying vehicles. Of these, 262 will meet replacement standards and five will require replacement because of accidents or excessive maintenance costs.

Dependability of passenger carrying vehicles is an important factor in keeping work programs on schedule and in meeting emergencies. Vehicle breakdowns while on field travel cause disruptions and delays in field work as well as loss of effective work time of employees. The continued use of over-aged equipment is undesirable from a safety standpoint since most of it is operated over rough, narrow, winding roads in mountainous country under adverse conditions. This use generally results in excessive operating and repair expenses when vehicles reach or exceed replacement standards.

In order to maintain passenger carrying vehicles in a safe and satisfactory operating condition, it is the policy of the Forest Service to schedule periodic preventive maintenance inspections, services, and tune-ups to reduce the necessity for costly repairs and major overhauls, and to minimize lost time resulting from field breakdowns.

It is desirable to maintain a reasonable balance in the age class of the passenger vehicle inventory. The age class distribution is based upon conforming with replacement standards which recognize that some units will be retired under the age standards and others under the use standard. Prescribed replacement standards, although applicable, are not always appropriate for all Forest Service vehicles because of the wide range of operating conditions and the comparatively short field season in many of the National Forests at higher elevations. Decision on replacement of passenger carrying vehicles which reach replacement age is based on an appraisal of each unit. This involves a review of the history record combined with a mechanical inspection of the vehicle's condition and repair liability. When such appraisal indicates that the vehicle is satisfactory for further service without unreasonable repair expenditures, it is retained and assigned to lighter work, even though such action tends to upset the age standards for the fleet inventory.

The vehicles selected for replacement are those which cannot be operated another season without excessive repair expense. They are unsatisfactory for further use both as to safety and mechanical condition. The replacement authorization requested is within the normal annual replacement standards prescribed by the General Services Administration.

Essentially all passenger carrying vehicles are pooled for use by all activities with replacement of pooled units financed from a Working Capital Fund. All appropriations reimburse this fund in ratio to use of vehicles on activities financed by the respective appropriations.

None of the replacements requested will be assigned to areas served or scheduled to be served by Interagency pools.

Additions

It is proposed that the Forest Service purchase 66 additional passenger carrying vehicles to replace pickups, carryalls and sedan deliveries. Since sedans and station wagons are better suited to our needs and are less costly to operate, we prefer replacement with passenger carrying vehicles.

Sedans or station wagons cost less to operate and maintain than a truck. During fiscal year 1974, the Forest Service is replacing 46 light trucks, such as carryalls, pickups, panels, and sedan delivery trucks, with sedans and station wagons. The total estimated cost savings is $9,200 per year. The substitution of 66 passenger carrying vehicles for light trucks in fiscal year 1975 would result in an additional savings of about $13,200 each year.

The Forest Service analyzes current work plans and programs in determining its overall passenger carrying vehicle requirements. This analysis includes a careful study of the number of vehicles needed at each field station using as a guiding principle the ownership of only the minimum number of dependable units required to serve programs for which funds are budgeted. Also, it is Forest Service policy to utilize Interagency Motor Pools or commercial car rental services to the fullest practicable extent. Passenger car use is restricted and is integrated with various activities so as to attain good utilization of all vehicles.

Additions are financed from program funds in direct relationship to the anticipated use of the equipment. Distribution of costs to appropriations is based on analysis of use of the equipment fleet for the past three years and the estimated use for the budget year.

Number of Vehicles

The Forest Service had a net active fleet of 1,024 passenger carrying vehicles at the start of fiscal year 1974. It will add 46 units during the year, making a total of 1,070 units available at the start of fiscal year 1975, excluding possible transfers to other agencies. It is proposed that the total number of passenger carrying vehicles be increased to 1,136 by the end of fiscal year 1975.

As of June 30, 1973, the age and mileage classes of the passenger carrying vehicles on hand, exclusive of 28 buses, were:

Age Data

Year	Number of Vehicles
1968 and older	325
1969	204
1970	161
1971	84
1972	77
1973	145
Total	996

Mileage Data

Miles	Number of Vehicles
60,000 and over	342
50,000 to 59,999	126
40,000 to 49,999	150
30,000 to 39,999	111
20,000 to 29,999	61
10,000 to 19,999	51
0 to 9,999	155
Total	996

Use of Vehicles

Passenger carrying vehicles are used by:

(1) Forest officers in the protection, utilization, management and development of the National Forests and land utilization projects and in the program for control of forest pests.

(2) Research technicians on experimental forests, and ranges, on field research projects and forest surveys.

(3) Foresters engaged in carrying out the laws providing for State and private forestry cooperation.

(4) Regional office field-going administrative personnel in performing, directing, and inspecting field work.

The Forest Service is essentially a field organization and its passenger carrying vehicles are located mainly at Regional, National Forest, and Ranger District headquarters, and experimental Forests and Ranges. There are over 225 million acres within the exterior boundaries of the National Forest.

About 631 million acres of State and private forest land are included within the areas which benefit from Federal participation in the cooperative forest program. Much of this area is without common carrier service, and most forest areas and research centers are remote from commercial travel routes, requiring extensive use of motor vehicles as a means of transportation. The major portion of transportation needs, particularly at Regional and Forest Supervisor levels and at other larger headquarters, involves multiple passenger use and can be more expeditiously and economically met by use of sedans and station wagons than by other types of vehicles.

AIRCRAFT

Replacement of Aircraft

The 1975 estimates propose replacement of four aircraft by purchase and replacements with more suitable aircraft by transfer from other agencies as available. The Forest Service currently has 53 aircraft:

7	Single-engine reconnaissance and transport airplanes
24	Light twin-engine reconnaissance and transport airplanes
16	Medium and heavy cargo and transport airplanes (9 medium, 7 heavy)
5	T34-B lead planes (2-place scout)
1	Multi-engine airplane converted to an air tanker
*53	

* Excludes 2 aircraft on hand awaiting disposal.

The replacements by purchase will be primarily medium twin-engine airplanes suitable for leadplane work in directing air tanker retardant dropping attack on forest fires. The North American OV-10A Bronco, currently being used by the Air Force is considered to have the most desirable characteristics to increase efficiency and improve safety in the leadplane mission.

Two large helicopters are on loan from the Army. These helicopters are being used for test and evaluation project in determining suitability of specific vision equipment for night helicopter operation. The equipment includes the Iroquois Night Fighter and Night Tracker (INFANT) and Forward Looking Infrared (FLIR) systems, and the night vision goggles. The loan of the helicopters will be terminated when the evaluation project is completed.

Tentative plans include requesting loan of a large heavy lift helicopter from the Army for use in a development project on helicopter logging. The project objective will be to develop efficient, economical and safe procedures which are now marginal.

One light twin-engine airplane is modified, equipped, and used primarily for fire mapping with infrared equipment in low visibility of smoke and at night.

One medium twin-engine is modified, equipped and used primarily for high altitude fire detection usually at night with infrared equipment. A second medium twin is being modified for Infrared Scanner missions.

The multi-engine airplane obtained from the military was converted to air tanker configuration for test and evaluation project to determine if suitable for dropping retardants. It is now being used in research project on high altitude retardant dropping.

The multipurpose reconnaissance and transport airplanes are used primarily to transport smokejumpers, firefighters, administrative personnel, equipment and supplies to remote and inaccessible areas where commercial services are inadequate or not available for protection and suppression of forest fires. Other use is to locate and survey timber stand and vegetation conditions such as insect infestations, blowdown, diseased areas, undesirable species, and to appraise resources and damage and evaluate effectiveness of control.

The T34-B lead airplanes are primarily single-purpose military model aircraft used by air tanker bosses to direct and control the dropping of retardants on forest fires by contract air tankers. These are to be replaced with light twins to provide two engine safety and improved efficiency.

The services of suitable airplanes to perform specific Forest Service missions are becoming increasingly more difficult to obtain from commercial sources. In some locations only the Forest Service needs the type of flights and they are insufficient in number to warrant operators furnishing the service. Aviation operators must therefore give first consideration to furnishing services for best revenue. In many instances the aircraft available is not suitable for Forest Service work.

Four heavy twin-engine transport airplanes are leased and operated for dual purpose in transporting firefighting crews or dropping smokejumpers. Three leased light twins fill additional requirements for leadplanes in directing air tanker retardant attack on fires.

Two single-engine T-28's are on temporary loan from the Navy for evaluation as air tanker leadplanes, especially where faster speed is needed.

Aircraft purchases are financed from either appropriated funds or the Forest Service Working Capital Fund, or a combination of both. Replacement costs of aircraft partially or completely destroyed in a crash accident are financed from program funds in relationship to anticipated use.

Changes three and four would give the Forest Service the authority to exchange partial interests (water rights for water, rights-of-way for rights-of-way, etc.), which are of particular value to the Forest Service.

Presently most of the exchanges are made under the authority of the General Exchange Act (42 Stat. 465, as amended) and other acts. These authorities do not, however, provide for exchange of partial interests in lands. They cover exchange of National Forest land for land and National Forest timber for land. The Forest Service is acquiring an increasing amount of partial interests in lands through purchase of scenic easements, right-of-way easements, etc. There are several instances when the interest of the Government would be best served if there was authority to exchange these partial interests for other lands or interest in lands.

The proviso (change four) will limit the use of the Act of August 3, 1956 (70 Stat. 1034; 7 U.S.C. 428a). Without this proviso all exchanges made could be made under the authority of this Act. It is intended that the 1956 authority be used sparingly.

Change five would eliminate the language which was added to the 1974 Appropriations Act to assure that the Congress would consent to any regional reorganization plans in fiscal year 1974.

If the Congress were to continue to include language in appropriation acts requiring Congressional consent of regional reorganization plans, our ability to implement needed reorganizations would be consideraly slowed.

The Forest Service has made many changes in organization through the years to obtain the most efficient and economic operation. These changes came as a result of extensive study and considered improved transportation, technology and methods of doing business. The administration of the National Forest System has been improved as a result of these changes.

This language would limit the ability of Forest Service management to take advantage of opportunities to improve efficiency and effectiveness by shifting Regional boundaries.

It is proposed that this language not be included in future appropriation acts.

The Forest Service plans to obtain the views of the Appropriations Subcommittees and the Agriculture and Forestry Committees in the House and Senate and the Member of Congress who would be affected before implementing regional reorganization plans even without this language.

ROADS AND TRAILS FOR STATES, NATIONAL FORESTS FUND
(Permanent appropriation)

Appropriation, 1973	$33,871,10[illegible]
Appropriation, 1974	45,468,547
Budget estimate, 1975	40,500,000
Decrease (due to an estimated decrease in National Forest receipts in fiscal year 1974)	-4,968,547

The permanent appropriation of 10 percent of National Forest receipts pursuant to the Act of March 4, 1913 (16 USC 501) is transferred to and merged with the annual appropriation for Forest Roads and Trails. The explanation of the use of these funds is included in the justification for that appropriation item.

EXPENSES, BRUSH DISPOSAL
(Permanent appropriation)

Appropriation, 1973	$23,310,037
Budget estimate, 1974	23,000,000
Budget estimate, 1975	22,440,000
Decrease (due to estimated decrease in receipts in fiscal year 1975)	-560,000

PROJECT STATEMENT

Project	1973	1974 estimate	1975 estimate	Increase or decrease
Brush disposal	$18,642,139	$25,000,000	$25,247,000	$247,000
Unobligated balance brought forward	-18,885,967	-23,553,865	-21,553,865	2,000,000
Unobligated balance carried forward	23,553,865	21,553,865	18,746,865	-2,807,000
Appropriation or estimate	23,310,037	23,000,000	22,440,000	-560,000

Timber cutting normally increases the fire hazard because of dry fuel increase in the form of logging slash. This slash may also:

(1) Impair reforestation.
(2) Contribute to the buildup of insect populations.
(3) Cause damage to stream channels.
(4) Degrade esthetics of the forest environment.

The objective of this program is the disposal of brush and other debris resulting from timber sale operations. When disposal is necessary National Forest timber sale contracts require treatment or deposit of funds for treatment of debris from cutting operations. When economical and expedient the work is performed by the timber purchaser. When not done by the purchaser, it is done by the Government, using deposits to cover costs of the work as authorized under Section 6 of the Act of April 24, 1950 (16 USC 490).

The effect of timber cutting and the manner of treating slash vary widely among regions. Brush disposal may be accomplished in several ways such as crushing, chipping, burning, or extra fire protection through the critical phase of natural disposal. Combinations of these are often used.

In the Eastern Regions, low volume cut per acre, high utilization, and rapid decomposition reduce the slash disposal work necessary. Exceptions occur in sales where a heavy cut per acre is made, such as the jack pine stands of Minnesota. In such areas, slash is crushed and mixed with mineral soil by disking with heavy equipment. This reduces the hazard and provides a good seedbed to aid regeneration. Treatment of slash to prevent insect epidemics is sometimes necessary in these areas.

In contrast, more slash disposal is required on most sale areas of the West. High volumes per acre generally produce heavy slash. Long dry periods with lightning and man-caused fire risk result in extremely hazardous fire potential. The warm, humid conditions necessary for rapid slash deterioration seldom occur. Treatment varies greatly with different methods of cutting, but generally requires some burning to reduce volumes of slash fuels. Slash may be burned in place or piled and burned under varied weather conditions. Fuel arrangements are planned which allow burning at times when smoke dispersal is favorable and will not influence air quality in population areas.

Within regions, slash disposal follows general prescriptions. Individual needs of each sale are planned and appraised prior to advertisement of the sale. The appropriate specific requirements are incorporated into each timber sale contract. In each instance, the method used will require adequate ecological, environmental, and resource protection at the least expense.

FOREST FIRE PREVENTION
(Permanent appropriation)

Appropriation, 1973	$228,373
Budget estimate, 1974	250,000
Budget estimate, 1975	250,000

PROJECT STATEMENT

Project	1973	1974 estimate	1975 estimate	Increase or decrease
Forest fire prevention	$218,674	$275,000	$277,000	$2,000
Unobligated balance brought forward	-180,326	-190,025	-165,025	25,000
Unobligated balance carried forward	190,025	165,025	138,025	-27,000
Appropriation or estimate	228,373	250,000	250,000	- -

The Smokey Bear licensing program is an important part of the Cooperative Forest Fire Prevention Campaign, and accomplishes its purpose through dissemination to the public of Smokey Bear's forest fire prevention message on commercial products licensed by the Chief of the Forest Service, and by support of the Smokey Bear Junior Forest Rangers, exhibits, and the Smokey Bear awards program through contribution of fees and royalties by licensees. Among the educational items presently available under this authority are books, games, bookcovers, television shows, Viewmaster reels, litterbags, children's clothing, musical recordings, and exhibits, to name a few. These items carry the forest fire prevention message to millions of Americans each year.

Examples of Recent Accomplishments

(1) Achieved a 27 percent increase in mass media donations of public service time and space to Smokey's 1972 campaign. The Advertising Council estimates that comparable time and space would have cost a commercial advertiser $40.1 million.

(2) Provided the funds to print and distribute 103,000 transit cards on forest fire prevention; 1,300 7-foot (3-sheet) posters for display in metropolitan transit stations; and 1,900 large (24-sheet) posters for display on downtown billboards.

(3) Secured a special distribution of full sets of newspaper ads to 350 labor press editors through the Director of Public Relations, AFL-CIO.

(4) More than doubled distribution of forest fire prevention filmed spots for use on cable television, sending two 60-second spots to each of 153 system operators.

(5) Published a new illustrated catalog of "Smokey Bear" licenses and licensed products, to increase the use of such items in forestry agencies and in rural market places.

RESTORATION OF FOREST LANDS AND IMPROVEMENTS

(Permanent appropriation)

Appropriation, 1973	$27,483
Budget estimate, 1974	50,000
Budget estimate, 1975	50,000

PROJECT STATEMENT

Project	1973	1974 estimate	1975 estimate	Increase or decrease
Restoration of forest lands and improvements	$18,660	$50,000	$50,000	- -
Unobligated balance brought forward	-8,778	-17,601	-17,601	- -
Unobligated balance carried forward	17,601	17,601	17,601	- -
Appropriation or estimate	27,483	50,000	50,000	- -

Recoveries from cash bonds or forfeitures under surety bonds by permittees or timber purchasers, who fail to complete performance of improvement, protection, or rehabilitation work required under the permit or timber sale contract, are used to cover the cost to the United States of completing such work on lands under Forest Service administration. Funds received as settlement of a claim are used for improvement, protection, or rehabilitation made necessary by the action which led to the cash settlement (Act of June 20, 1958, 16 USC 579c).

PAYMENT TO MINNESOTA (COOK, LAKE, AND ST. LOUIS COUNTIES) FROM THE NATIONAL FORESTS FUND
(Permanent appropriation)

Appropriation, 1973	$259,038
Appropriation, 1974	259,038
Budget estimate, 1975	259,038

PROJECT STATEMENT

Project	1973	1974 estimate	1975 estimate	Increase or decrease
Payment to Minnesota from the National Forests Fund (appropriation or estimate)	$259,038	$259,038	$259,038	- -

The Act of June 22, 1948, as amended (16 USC 577c-577h) provides that the Secretary of the Treasury, upon certification of the Secretary of Agriculture, shall pay to the State of Minnesota at the close of each fiscal year from any National Forest receipts not otherwise appropriated an amount equivalent to three-fourths of one percent of the fair appraised value of certain National Forest lands in the counties of Cook, Lake, and St. Louis situated within the Superior National Forest. The Act further provides that payment to the State shall be distributed to each of these counties in conformity with the fair appraised value of such National Forest lands in each county.

PAYMENTS TO COUNTIES, NATIONAL GRASSLANDS
(Permanent appropriation)

Appropriation, 1973	$508,864
Budget estimate, 1974	549,000
Budget estimate, 1975	549,000

PROJECT STATEMENT

Project	1973	1974 estimate	1975 estimate	Increase or decrease
Payment to counties (appropriation or estimate)	$508,864	$549,000	$549,000	- -

At the end of each calendar year, 25 percent of the revenues from use of submarginal lands are paid to counties under the provisions of Title III of the Bankhead-Jones Farm Tenant Act, approved July 22, 1937 (7 USC 1012). Payments are made on the provision that they are used for school or road purposes, or both.

PAYMENTS TO SCHOOL FUNDS, ARIZONA AND NEW MEXICO
(Permanent appropriation)

Appropriation, 1973	$114,043
Appropriation, 1974	124,307
Budget estimate, 1975	115,000
Decrease (due to an estimated decrease in National Forest receipts in fiscal year 1974)	-9,307

PROJECT STATEMENT

Project	1973	1974 estimate	1975 estimate	Increase or decrease
Payments to school funds (appropriation or estimate)	$114,043	$124,307	$115,000	-$9,307

Under provisions of the Act of June 20, 1910 (36 Stat. 562, 573) certain areas within National Forests were granted to the States for school purposes. The percentage that these lands are of the total National Forest area within the State is used in determining payments to the States. The receipts from all National Forest land within the State are used as the basis for applying the percentage. For example, if total receipts for the State are $100,000 and if 10 percent of lands are in the "granted for school purposes" category, the payment to the State would be $10,000. The amounts so paid are deducted from the net receipts before computing the 25 percent payments to States.

As soon after the close of the fiscal year as the receipts from National Forests and the area of school lands in the States of Arizona and New Mexico are determined, the payments are made to the States. Payments in fiscal year 1973 to Arizona were $113,212 and to New Mexico $831.

PAYMENTS TO STATES, NATIONAL FORESTS FUND
(Permanent appropriation)

Appropriation, 1973	$84,676,129
Appropriation, 1974	113,668,668
Budget estimate, 1975	101,200,000
Decrease (due to an estimated decrease in National Forest receipts)	-12,468,668

PROJECT STATEMENT

Project	1973	1974 estimate	1975 estimate	Increase or decrease
Payments to States (appropriation or estimate)	$84,676,129	$113,668,668	$101,200,000	-$12,468,668

The Act of May 23, 1908, as amended (16 USC 500) requires, with a few exceptions, that 25 percent of all money received from the National Forests during any fiscal year be paid to the States in which the forests are located, for the benefit of public schools and public roads of the county or counties in which such National Forests are situated. The amount of this appropriation varies each year in direct proportion to National Forest receipts during the previous fiscal year.

The amounts set aside from receipts collected from the sale of National Forest timber, grazing, special use permits, power, mineral leases, and admission and user fees, before the 25 percent is applied are listed below:

(1) Payment to the State of Minnesota covering certain National Forest lands in Counties of Cook, Lake, and St. Louis situated within the Superior National Forest is made under the terms of the Act of June 22, 1948, as amended (16 USC 577c-577h). Receipts collected from the areas covered by this Act are excluded when the 25 percent payment to the State of Minnesota is computed.

(2) For lands in certain counties in Utah, Nevada, and California, the States receive 25 percent of receipts only after funds, if made available by Congress, have been set aside for the acquisition of National Forest lands within the specified National Forests under the terms of special acts authorizing appropriations from forest receipts for this purpose.

(3) Payments to the States of Arizona and New Mexico under the provisions of the Act of June 20, 1910 (36 Stat. 562, 573), of shares of the gross receipts from the National Forests in those States which are proportionate to the areas of land granted to the States for school purposes within the National Forests.

WORKING CAPITAL FUND

The Working Capital Fund was established by the Act of August 3, 1956 (16 USC 579b), as amended by the Act of October 23, 1962 (16 USC 579b). It is a self-sustaining revolving fund which provides services to National Forests, Experiment Stations, and when necessary, to other Federal agencies, and as provided by law to State and private agencies and persons who cooperate with the Forest Service in fire control and other authorized programs.

The following services were provided by the Working Capital Fund in fiscal year 1973:

(1) Equipment service.--This service owns, operates, maintains, and replaces approximately 13,500 pieces of common use motor driven and similar equipment. This equipment is rented to a total of 146 administrative units, i.e., National Forests, Experiment Stations and other units, and in some cases to other agencies, at rates which recover the cost of operation, repair and maintenance, management, and depreciation. The rates also include an increment which provides additional cash which when added to depreciation earnings and the residual value of equipment provides sufficient funds to replace the equipment. This service operates 74 repair shops.

(2) Aircraft service.--This service operates and maintains 57 Forest Service owned aircraft used in fire surveillance and suppression and in other Forest Service programs. The aircraft are based at 16 locations and are rented to National Forests, Experiment Stations, and in some cases to other agencies, at rates which recover the cost of depreciation, operation, maintenance, repair, and improvements in the airworthiness of the aircraft. Aircraft replacement costs are financed from either appropriated funds or the Forest Service Working Capital Fund, or a combination of both. This service operates two aircraft maintenance shops.

(3) Supply service.--This service operates the following common services:

Central Supply.--Grass seed is procured, stored and issued from two locations. Issuances and sales are made to National Forests, Experiment Stations, and others at prices which recover cost.

Photo reproduction.--Six photo reproduction laboratories store, reproduce, and supply aerial photographs, aerial maps, and other photographs of National Forest lands. The photographic reproductions are sold to National Forests, Experiment Stations, and others at cost.

Sign shop.--These include four small shops which manufacture and supply special signs for the National Forests for use in regulating traffic and as information to the public and other users of the National Forests. The signs are sold to National Forests and Experiment Stations at cost.

Subsistence.--There are 18 facilities which prepare and serve meals at cost to Forest Service work crews working in remote areas where adequate public restaurant facilities are not available.

Cribbing.--This facility is located on the Angeles National Forest, California to manufacture special concrete structural material used in embankments for erosion control purposes along access roads in the National Forests. This material is sold to National Forests at prices which recover costs.

(4) Nurseries.--This service operates 12 forest tree nurseries and cold storage facilities for storage of tree and seed stock and three seed extractories. Tree seed is procured, cleaned, bagged, and stored in refrigerated facilities. Tree and seed stock is sold to National Forests, States, and other Federal agencies at cost.

Volume of Business for the Various Major Activities of the Working Capital Fund

(In thousands)

	1973 actual	1974 estimate	1975 estimate
Equipment service	$25,351	$27,736	$27,272
Aircraft service	1,238	1,793	1,410
Supply service	2,509	2,186	1,736
Nursery service	3,437	3,828	3,835
Totals	32,535	35,543	34,253

The Working Capital Fund requires no cash appropriation. Initially, its assets were purchased by regular Forest Service appropriations and were donated to the fund. Where expansion of facilities is required that expansion is financed by Forest Service regular appropriations and the resulting assets are donated to the fund.

COOPERATIVE WORK, FOREST SERVICE (TRUST FUND)

Contributions are received from cooperators, including counties, States, timber sale operators, individuals, and associations, and are expended by the Forest Service in accordance with the terms of the applicable cooperative agreements. The work consists of protection and improvement of the National Forests, work performed for National Forest users, and forest investigations and protection, reforestation, and administration of private forest lands.

The major programs conducted under this account are described below in terms of the projects reflected in the statement at the end of this section.

(1) Construction and Maintenance of Roads and Trails, and

(2) Construction and Maintenance of Other Improvements.

Under the Acts of June 30, 1914 (16 USC 498) and March 3, 1925, April 24, 1950 (16 USC 572) and October 13, 1964 (16 USC 537) deposits for cooperative work are accepted from State and local government agencies, associations, Federal timber purchasers, users of roads, and others for the construction and maintenance of roads, trails, and other improvements and for performing work which is the National Forest users' responsibility, this method of performance of the work being of mutual benefit or of benefit to the public at large. Cooperative deposits received for wildlife habitat improvement for States from their hunting and fishing fees are included in this activity.

(3) Protection of National Forest and Adjacent Non-Federal Lands. The Act of June 30, 1914 (16 USC 498) authorizes the acceptance of contributions for the protection of the National Forests and the Act of March 3, 1925, as amended by Section 5, Act of April 24, 1950 (16 USC 572), authorizes the acceptance of deposits for the protection of non-Federal lands in or near the National Forests. The major portion of the obligations is for the protection of private lands from fire. This arrangement helps both parties since there are millions of acres of non-Federal forest land intermingled with Federal ownership on the National Forests. The lands in non-Federal ownership are usually in small tracts. It would be uneconomical for the owner to set up a fire control organization for the protection of his land. The advantage to the Government is that in many cases it would be necessary to suppress the fires on the non-Federal land without reimbursement in order to protect the adjoining Federal land.

(4) Sale Area Betterment (including reforestation). Section 3 of the Act of June 9, 1930 (16 USC 576b) provides for deposits of funds by timber sale purchasers to cover the cost of reforestation and special cultural measures to improve the future stand of timber on the areas cutover by the purchaser. Accomplishments under this program are reported under the Forest land management subappropriation along with accomplishments for reforestation and stand improvement for that subappropriation.

(5) Scaling. Under provisions of the Act of April 24, 1950 (16 USC 572) and of Section 210 of the Act of September 21, 1944 (16 USC 572a) acceptance of deposits from timber purchasers for cooperative scaling service is authorized. Such arrangements are established only when requested by the operator and when the operator pays the extra cost of such services, either in advance or through reimbursement under appropriate payment guarantees.

(6) Research Investigations. The Acts of June 30, 1914 (16 USC 498) and May 22, 1928 (16 USC 581i-1) authorize the acceptance of deposits for forestry research. Deposits are received from State and other public agencies, and from industrial, association, and other private agencies to finance research projects of mutual interest and benefit to both parties. The deposits may be made either in a single sum or on a continuing basis, and may either partially or wholly cover the cost of the research. The cooperative research projects may involve any aspect of forestry and vary widely as to scope and duration.

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A very common example of such cooperation is for a State to make a deposit to the Cooperative work fund in order to intensify or to speed up completion of a comprehensive survey of the forest resources of the State. Other examples are State contributions toward forest fire research. The results of such cooperative investigations are made available to the general public as well as to the depositor.

(7) Administration of Non-Federal Lands. The Act of March 3, 1925, as amended by Section 5, Act of April 24, 1950 (16 USC 572) authorizes the acceptance of deposits for the administration of non-Federal lands. These deposits are made by non-Federal owners having land intermingled with or adjacent to National Forests who wish these lands managed in accordance with good forest management practices. Their holdings are usually too small to warrant the employment of professional foresters to administer such tracts. The advantages to the Government include the avoidance of possible high fire hazard areas resulting from improper cutting practices, the elimination of the necessity of precisely marking the boundaries of the private land, and additional private forest land handled under proper forest practices.

(8) Reforestation (private lands). The Act of March 3, 1925, as amended by Section 5, Act of April 24, 1950 (16 USC 572) authorizes the acceptance of deposits for reforestation of non-Federal lands situated within or near a National Forest. This work is limited to areas of non-Federal land within a planting project on the National Forests or to areas in which certain civic and other public-spirited organizations have taken an interest.

(9) Statement on Utilization of Funds. Following is a statement of funds received and obligated and balances available by major activities:

COOPERATIVE WORK, FOREST SERVICE--Trust Fund

	Balance Available June 30, 1972	Actual Fiscal Year 1973			Estimate Fiscal Year 1974			Estimate Fiscal Year 1975		
		Funds Received	Obligations	Balance	Funds Received	Obligations	Balance	Funds Received	Obligations	Balance
1. Construction and maintenance of roads and trails	$6,690,551	$10,314,183	$7,772,771	$9,231,963	$9,000,000	$8,890,000	$9,341,963	$12,360,000	$9,200,000	$12,501,963
2. Construction and maintenance of other improvements	759,394	1,062,755	801,443	1,020,706	800,000	840,000	980,706	1,000,000	890,000	1,090,706
3. Protection on National Forests and adjacent private land:										
(a) Fire	589,888	2,611,945	2,514,316	687,517	2,000,000	2,640,000	47,517	2,600,000	2,600,000	47,517
(b) Other	2,609,233	2,735,090	2,355,003	2,989,320	2,000,000	2,439,000	2,550,320	2,700,000	2,600,000	2,650,320
4. Sale area betterment on National Forest lands (including reforestation)	56,946,447	42,594,721	32,629,279	66,911,889	47,800,000	42,558,000	72,153,889	46,740,000	42,975,000	75,918,889
5. Scaling of timber	246,145	1,445,561	1,405,406	286,300	1,400,000	1,426,000	260,300	1,400,000	1,426,000	234,300
6. Research investigations	245,062	777,373	690,147	332,288	600,000	710,000	222,288	700,000	727,000	195,288
7. Administration of private lands	21,719	65,672	67,815	19,576	65,000	68,000	16,576	65,000	68,000	13,576
8. Reforestation (private lands)	115,271	31,945	36,855	110,361	35,000	37,000	108,361	35,000	37,000	106,361
Total	68,223,710	61,639,245	48,273,035	81,589,920	63,700,000	59,608,000	85,681,920	67,600,000	60,523,000	92,758,920

NOTE: Balances carried forward are due primarily to necessity of deferring work for which funds are deposited until the most practicable time for accomplishment. For instance, funds for sale area betterment are received in advance of timber cutting, but work cannot be started until cutting operations are completed. The time lag sometimes extends for several years, depending on the amount of preparatory work required in the sale area and weather conditions.

Above obligations for 1973 include refunds to cooperators in the amount of $104,798.

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

Fiscal Year 1975
(in thousands)

	NOA	Outlays			
		From Prior Year Obligations	From Unobligated Balance	From 1975 Obligational Authority	Total
Forest Protection and Utilization:					
Forest Land Management	$291,136	$53,273	$2,128	$237,957	$293,358
Forest Research	64,485	12,794	- -	51,619	64,413
State and Private Forestry Cooperation	29,746	5,738	- -	23,953	29,691
Total, Forest Protection and Utilization	385,367	71,805	2,128	313,529	387,462
Construction and Land Acquisition	24,147	20,940	- -	12,979	33,919
Forest Roads and Trails	140,000	34,419	81,581	- -	116,000
Construction and Operation of Recreation Facilities	1,260	150	- -	1,000	1,150
Acquisition of Lands for National Forests: Special Acts	161	21	- -	129	150
To Complete Land Exchanges	39	- -	- -	39	39
Assistance to States for Tree Planting	1,346	395	- -	947	1,342
Youth Conservation Corps	10,240	2,182	3,107	4,925	10,214
Cooperative Range Improvements	700	- -	- -	700	700
Roads and Trails for States, National Forests Fund (R&T 10%)	40,500	- -	- -	40,500	40,500
Expenses, Brush Disposal	22,440	4,036	21,203	- -	25,239
Forest Fire Prevention (Smokey Bear)	250	63	165	49	277
Restoration of Forest Lands and Improvements	50	12	18	15	45
Payment to Minnesota	259	- -	- -	259	259
Payments to Counties, National Grasslands	549	- -	- -	549	549
Payments to School Funds, Arizona and New Mexico	115	- -	- -	115	115
Payments to States, National Forests Fund	101,200	- -	- -	101,200	101,200
Cooperative Work, Forest Service (Trust Fund)	67,600	9,011	51,085	- -	60,096
Working Capital Fund	- -	6,274	-9,432	- -	-3,158
Total	796,223	149,308	149,855	476,935	776,098

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STATEMENT No. 1

UNITED STATES DEPARTMENT OF AGRICULTURE, FOREST SERVICE
STATEMENT OF CASH RECEIPTS, APPROPRIATION EXPENDITURES, OTHER INCOME AND EXPENSES
NATIONAL FOREST PROGRAMS FOR FISCAL YEAR ENDED JUNE 30, 1973

Cash Receipts from Sale and Use of Forest Resources	National Forests (Other than shown at right	Oregon and Calif. Grant Lands (National Forest	National Grasslands and Land Utilization Areas	Total
Timber and Forest Regular Receipts	$434,410,996	$12,320,058	$ 1,977	$446,733,031
Grazing	5,376,834	2,561	816,304	6,195,699
Land Uses	1,055,993	33,443	24,911	1,114,347
Recreation	4,625,803		169	4,625,972
Power	238,776		2,369	241,145
Mineral Leases and Permits	5,452,375		1,325,134	6,777,509
Admission and Users Fees	4,056,028		3,803	4,059,831
Total	$455,216,805	$12,356,062 1/	$2,174,667	$469,747,534
Cash Receipts from Deposits for Expenditures on National Forests				
Timber Sale Area Betterment	$ 42,591,684			
Brush Disposal	23,310,037			
Cooperator Contributions	14,236,250			
Restoration of Improvements	27,483			
Annual Admission Rec. Permit (Golden Eagle Passport, FS (125009.1)	17,740			
Special Recreation Use Fees F.S. (125009.11)	623,679			
Total	$ 80,806,873			$ 80,806,873
Other Cash Receipts				
Miscellaneous (Sale, Rentals, etc.)	$ 3,656,484			$ 3,656,484
Other Income				
Estimated Collections by Federal Power Commission for Power Licenses Issued on Public Domain National Forest Land	$ 172,601			
Estimated Collections in Conjunction with the Department of Interior for Mineral Leases, Licenses, and Permits on Public Domain National Forest Land	$ 33,941,639			
Estimated Value of Roads Built by Timber Purchasers through Allowance in Selling Price of Timber	$ 67,946,011			$102,060,251
TOTAL CASH RECEIPTS AND INCOME				$656,271,142

APPROPRIATION EXPENDITURES	Total	Asset	Operating
Protection and Management	$ 227,175,876	$ 6,077,316	$ 221,098,560
Fighting Forest Fires	62,141,570	148,765	61,992,805 2/
Insect and Disease Control	6,045,087	195,789	5,849,298
Water Resource Development	3,882,384	207,196	3,675,188
Construction, Forest Service	26,523,458	15,102,825	11,420,633
Forest Roads and Trails	157,495,156	76,927,278	80,567,878
Forest Protection and Management (12X1100)	4,497,467	583,892	3,913,575
Cooperative Law Enforcement	1,935,121	92,752	1,842,369
Acquisition of Lands	1,424,064	1,280,779	143,285
Flood Prevention and Watershed Protection	3,479,896	308,857	3,171,039
Restoration of Lands and Improvements	18,660	19	18,641
Cooperator Funds	10,982,061	961,362	10,020,699
Timber Sale Area Betterment(KV)	32,629,279	576,672	32,052,607
Brush Disposal	18,642,139	459,887	18,182,252
Youth Conservation Corps.	1,741,309	6,825	1,734,684
Total	$558,613,527	$102,930,014	$455,683,513
OTHER EXPENSES			
Depreciation Expense on Roads, Trails Other Improvements and Equipment (Other than Working Capital Fund). (Included for the purpose of giving recognition to the principle of allocating asset depreciation costs to operating expenses. The amount shown is an estimate and is not shown on the accounting records)			$ 89,442,538
TOTAL OPERATING EXPENDITURES			$545,126,051
EXCESS OF RECEIPTS AND INCOME OVER OPERATING EXPENDITURES			$ 111,145,091

1/ F. Y. 1973 Receipts O&C Grant Lands transferred to Interior (BLM)
2/ F. Y. 1973 FFF Expenditures exceeded 5-year average by $13,406,422

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STATEMENT NO. 2

U. S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE

STATEMENT OF RECEIPTS AND EXPENDITURES

ALL PROGRAMS AND SOURCES FOR FISCAL YEAR ENDED JUNE 30, 1973

	RECEIPTS	EXPENDITURES
NATIONAL FOREST PROGRAMS		
Cash Receipts and Appropriation Expenditures	$ 554,210,891	$ 558,613,527
Cash Receipts from National Forest Land collected in conjunction with, and deposited to, Accounts of other Agencies (Federal Power Commission, Department of Interior)	34,114,240	
Non-Cash Income and Expense (Roads Built by Timber Purchasers)	$ 67,946,011	$ 67,946,011
Total	656,271,142	626,559,538
FOREST RESEARCH PROGRAMS		
Forest Research Appropriations	---	$ 57,751,629
Research Construction	---	353,248
Cooperative Research Work	$ 777,373	690,147
Total	$ 777,373	$ 58,795,024
STATE AND PRIVATE FORESTRY PROGRAMS		
Fire Protection, Tree Distribution and Forest Management Cooperation	---	$ 27,702,312
Assistance to States for Tree Planting	---	1,024,213
Insect and Disease Control	---	5,110,663
Flood Prevention and Watershed Protection	---	5,742,462
Forest Fire Prevention (Smokey Bear)	$ 228,373	218,674
Cooperative Funds	2,588,244	2,566,142
Total	$ 2,816,617	$ 42,364,466
WORK FOR OTHER GOVERNMENT AGENCIES AND NON-GOVERNMENT PERSONS AND FIRMS		
Manpower Training Activities	---	$ 27,592,213
Public Service Career	---	---
Land and Water Conservation Service Program	147,703 1/	27,560,636
Insect and Disease Control (Interior Dept Lands)	---	---
Miscellaneous Work for Other Govt. Agencies	$ 6,037,977	20,246,798
Work Performed for Non-Government Persons, Firms ... Cooperative Work	1,445,694	1,404,936
... Reimbursed	2,234,943	2,234,943
Total	$ 9,866,317	$ 79,039,526
GRAND TOTAL	$ 669,731,449	$806,758,554
CASH RECEIPTS DISTRIBUTED TO STATES, COUNTIES AND PUERTO RICO AS DIRECTED		
Payments to States and Puerto Rico (Act of 5/23/08) N. F. Fund	---	$ 84,676,129
Payments to School Funds, Arizona and New Mexico (Act of 6/20/10) N. F. Fund	---	114,043
Payments to Minnesota (Cook, Lake and St. Louis Counties:Superior N. F.) N. F. Fund	---	259,038
Payments to Counties, National Grasslands & Land Utilization Areas (Act of 7/22/37) Receipts	---	508,864
Total		$ 85,558,074
INTERNAL EQUIPMENT AND SUPPLIES SERVICE (WORKING CAPITAL FUND)		
Financed Primarily by Charges included Above to Forest Service Programs	$ 37,061,037	$ 34,571,779

1/ Receipts $147,703 deposited to credit of the Department of Interior (BOR)
NOTE: Expenditures are on an obligation basis.

UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST SERVICE

ACTIONS ON BUDGET ESTIMATES FOR FISCAL YEAR 1975

No. 3

1630
Washington, D.C.
February 4, 1974

President Nixon's budget for 1975 was presented to Congress on February 4, 1974. The following shows the amounts for 1974 and Office of Management and Budget allowances for 1975. The amounts shown are now public information.

Appropriation Item and Projects	1974 Appropriation Act 1/	1974 Increased Pay Costs	1974 Adjusted Base for 1975 (1 - 2)	1975 Increase or Decrease			Total 1975 President's Budget (3 - 6)
				Pay Costs	GSA Space	Program	
APPROPRIATED FUNDS	(1)	(2)	(3)	(4)	(5)	(6)	(7)
FOREST PROTECTION AND UTILIZATION:							
FOREST LAND MANAGEMENT:							
National forest protection and management:							
Timber resource management:							
(a) Sales administration and management	$75,286,000	$4,177,000	$79,463,000	$675,000	$2,183,000	$1,974,000	$84,295,000
(b) Reforestation and stand improvement	32,178,000	1,153,000	33,331,000	427,000	1,601,000	-42,000	35,317,000
Recreation use	42,302,000	2,368,000	44,670,000	382,000	1,390,000	80,000	46,522,000
Wildlife and fish habitat management	8,285,000	409,000	8,694,000	66,000	261,000	209,000	9,230,000
Rangeland management	14,991,000	822,000	15,813,000	133,000	532,000	-4,000	16,474,000
Soil and water management	14,464,000	753,000	15,217,000	94,000	438,000	-534,000	15,215,000
Minerals management	4,251,000	185,000	4,436,000	29,000	165,000	- -	4,630,000
Forest fire protection	34,338,000	2,021,000	36,359,000	326,000	1,847,000	-2,014,000	36,518,000
General land management activities	23,601,000	1,140,000	24,741,000	185,000	854,000	680,000	26,460,000
Total, National forest protection and management	249,696,000	13,028,000	262,724,000	2,317,000	9,271,000	349,000	274,661,000
Deduct from Rangeland management above Cooperative range improvements--permanent (receipts) appropriation	700,000		700,000				700,000
National forest protection and management appropriated in the Appropriation Act	248,996,000	13,028,000	262,024,000	2,317,000	9,271,000	349,000	273,961,000
Fighting forest fires	4,275,000		2/ 4,275,000				4,275,000
Insect and disease control	10,835,000	384,000	11,219,000	62,000	245,000	-250,000	11,276,000
Cooperative law enforcement	2,527,000	55,000	3/ 2,582,000	8,000	41,000	-1,007,000	1,624,000
TOTAL, FOREST LAND MANAGEMENT	266,633,000	13,467,000	280,100,000	2,387,000	9,557,000	-908,000	291,136,000
FOREST RESEARCH:							
Forest and range management research:							
Trees and timber management research	12,321,000	797,000	13,118,000	127,000	357,000		13,602,000
Forest watershed management research	7,216,000	494,000	7,710,000	79,000	177,000	-250,000	7,716,000
Wildlife, range, and fish habitat research	4,248,000	234,000	4,482,000	37,000	116,000	-775,000	3,860,000
Forest recreation research	1,253,000	73,000	1,326,000	12,000	34,000	-150,000	1,222,000
Total, Forest and range management research	25,038,000	1,598,000	26,636,000	255,000	684,000	-1,175,000	26,400,000
Forest protection research:							
Fire and atmospheric sciences research	7,578,000	269,000	7,847,000	43,000	177,000		8,067,000
Forest insects and disease research	10,190,000	571,000	10,761,000	91,000	444,000	-360,000	10,936,000
Total, Forest protection research	17,768,000	840,000	18,608,000	134,000	621,000	-360,000	19,003,000

Appropriation Item and Projects	1974 Appropriation Act 1/	1974 Increased Pay Costs	1974 Adjusted Base for 1975 (1 - 2)	1975 Increase or Decrease: Pay Costs	GSA Space	Program	Total 1975 President's Budget (3 - 6)
APPROPRIATED FUNDS--continued	(1)	(2)	(3)	(4)	(5)	(6)	(7)
FOREST PROTECTION AND UTILIZATION--continued							
FOREST RESEARCH--continued							
Forest products and engineering research:							
Forest products utilization research	9,231,000	492,000	9,723,000	79,000	93,000		9,895,000
Forest engineering research	1,478,000	69,000	1,547,000	11,000	35,000		1,593,000
Total, Forest products and engineering research	10,709,000	561,000	11,270,000	90,000	128,000		11,488,000
Forest resource economics research:							
Forest resources evaluation	3,433,000	216,000	3,649,000	34,000	137,000		3,820,000
Forest economics and marketing research	3,437,000	216,000	3,653,000	35,000	86,000		3,774,000
Total, Forest resource economics research	6,870,000	432,000	7,302,000	69,000	223,000		7,594,000
TOTAL, FOREST RESEARCH	60,385,000	3,431,000	63,816,000	548,000	1,656,000	-1,535,000	64,485,000
STATE AND PRIVATE FORESTRY COOPERATION:							
Cooperation in forest fire control	20,000,000	79,000	20,079,000	13,000	85,000		20,177,000
Cooperation in forest tree planting	325,000	7,000	332,000	1,000			333,000
Cooperation in forest management and processing	5,000,000	52,000	5,052,000	19,000	43,000	460,000	5,574,000
General forestry assistance	2,594,000	124,000	2,718,000	46,000	57,000	841,000	3,662,000
TOTAL, STATE AND PRIVATE FORESTRY COOPERATION	27,919,000	262,000	28,181,000	79,000	185,000	1,301,000	29,746,000
TOTAL, FOREST PROTECTION AND UTILIZATION	354,937,000	17,160,000	372,097,000	3,014,000	11,398,000	-1,142,000	385,367,000
CONSTRUCTION AND LAND ACQUISITION: 4/							
Development of recreation-public use areas	1,075,000		1,075,000	63,000	48,000	716,000	1,902,000
Water resource development construction	169,000		169,000	35,000	52,000	1,949,000	2,205,000
Construction for fire, administration, and other purposes	1,103,000		1,103,000	45,000	41,000	540,000	1,729,000
Research construction	5,058,000		5,058,000			-5,058,000	
Pollution abatement	17,738,000		17,738,000	713,000	316,000	-2,034,000	16,733,000
Land acquisition, Weeks Act	1,300,000		1,300,000	16,000	2,000	260,000	1,578,000
TOTAL, CONSTRUCTION AND LAND ACQUISITION	26,443,000		26,443,000	872,000	459,000	-3,627,000	24,147,000
FOREST ROADS AND TRAILS: 5/							
Construction	99,999,547	6,000,000	105,999,547	940,000	2,640,000	12,775,453	122,355,000
Maintenance	37,669,000		37,669,000	311,000	1,165,000		39,145,000
Total	137,668,547	6,000,000	143,668,547	1,251,000	3,805,000	12,775,453	161,500,000
Transfer from Roads and Trails for States (10% Fund)--permanent appropriation	-45,468,547		-45,468,547			4,968,547	-40,500,000
FOREST ROADS AND TRAILS appropriated in the Appropriation Act	92,200,000	6,000,000	98,200,000	1,251,000	3,805,000	17,744,000	121,000,000
ACQUISITION OF LANDS FOR NATIONAL FORESTS, SPECIAL ACTS	94,000		94,000			67,000	161,000
ACQUISITION OF LANDS TO COMPLETE LAND EXCHANGES	55,300		55,300			-15,990	39,310
COOPERATIVE RANGE IMPROVEMENTS	700,000		700,000				700,000
ASSISTANCE TO STATES FOR TREE PLANTING	1,013,000		1,013,000	23,000	18,000	292,000	1,346,000
CONSTRUCTION AND OPERATION OF RECREATION FACILITIES	3,277,837		3,277,837			-2,017,837	1,260,000
YOUTH CONSERVATION CORPS	10,000,000		10,000,000	220,000	20,000		10,240,000
TOTAL, APPROPRIATED FUNDS	488,720,137	23,160,000	511,880,137	5,380,000	15,700,000	11,300,173	544,260,310
ALLOCATED FUNDS							
WATERSHED AND FLOOD PREVENTION, SCS	5,092,000	272,000 6/	5,364,000	99,000	117,000	-111,000	5,469,000
WATERSHED PLANNING, SCS	602,000	37,000	639,000	18,000	17,000	-36,000	638,000
RESOURCE CONSERVATION AND DEVELOPMENT, SCS	852,000	8,300	860,300	3,300	5,000	-60,600	808,000
RIVER BASIN SURVEYS AND INVESTIGATIONS, SCS	1,508,000	93,000	1,601,000	58,000	43,000	46,000	1,748,000
SALARIES AND EXPENSES, FHA	100,000		100,000			-100,000	
SALARIES AND EXPENSES, ARS	497,000	14,000	511,000	8,500		-6,000	513,500
OREGON AND CALIFORNIA GRANT LANDS	2,771,000		2,771,000		31,000	798,000	3,600,000
MANPOWER TRAINING ACTIVITIES (JOB CORPS)	27,426,000		27,426,000	N O T A V A I L A B L E			
LAND AND WATER CONSERVATION FUND	3,970,000		3,970,000		138,000	12,892,000	17,000,000
APPALACHIAN REGIONAL DEVELOPMENT PROGRAMS, EXECUTIVE	45,000		45,000				45,000
FEDERAL-AID HIGHWAY TRUST FUND	4,505,000		4,505,000			-4,118,000	387,000
TOTAL, ALLOCATED FUNDS							

1/ Excludes transfers to General Services Administration for cost of office space, as follows:

Sales administration and management	$268,000
Recreation use	168,000
Forest fire protection	123,000
Trees and timber management research	15,000
Total, Forest Protection and Utilization	574,000

For comparability, following adjustments included:

(a) $159,000 for Wild and Scenic Rivers Studies shown under General Forestry Assistance rather than under Soil and water management as appropriated.

(b) $500,000 for log export control shown under Sales administration and management rather than under Reforestation and stand improvement as appropriated.

(c) $1,000,000 for surface environment and mining (SEAM) is shown under Minerals management rather than under Soil and water management as appropriated.

Includes following amounts in the Supplemental Appropriations Act, 1974 (PL 93-245, 1/3/74):

	Additional Timber Sell	Insect and Disease Program	Timber Salvage and Rehabilitation of Tussock Moth Infested Areas	Modular Airborne Firefighting System
FOREST PROTECTION AND UTILIZATION:				
National Forest protection and management:				
Sales administration and management	$5,749,000		$396,000	
Reforestation and stand improvement			42,000	
Recreation use	190,000			
Wildlife habitat management	202,000		21,000	
Rangeland management			4,000	
General land management activities	224,000			
Soil and water management	465,000		13,000	
Forest fire protection	110,000		824,000	$1,400,000
Insect and disease control (gypsy moth)		$250,000		
Forest Research:				
Forest insects and disease research		240,000		
	6,940,000	490,000	1,300,000	1,400,000
FOREST ROADS AND TRAILS -- cash	1,500,000			
program level	8,060,000			

2/ Excludes proposed supplemental of $90.8 million for fighting forest fires.

3/ Following is a comparison between fiscal years 1974 and 1975 on an obligation basis:

	1974	1975 President's Budget
Cooperative law enforcement	$3,461,843	$3,752,000

4/ Following is a comparison between fiscal years 1974 and 1975 on an obligation basis:

	1974 (Includes unobligated balance carried forward from FY 1973)	1975 President's Budget
CONSTRUCTION AND LAND ACQUISITION:		
Development of recreation-public use areas	$4,771,322	$1,902,000
Water resource development construction	2,123,750	2,205,000
Construction for fire, administration, and other purposes	2,246,596	1,729,000
Research construction	6,457,924	- -
Pollution abatement	36,358,723	16,733,000
Land acquisition, Weeks Act	1,302,956	1,578,000
Total, Construction and Land Acquisition	53,261,271	24,147,000

5/ Amounts shown are not obligations but cash requirments to liquidate obligations. The obligational authority authorized for use in 1975 is $106.4 million.

Following is a comparison between fiscal years 1974 and 1975 on an obligation basis.

	1974	1975 President's Budget
FOREST ROADS AND TRAILS:		
Construction	$92,546,000	$107,802,000
Maintenance	37,669,000	39,145,000
Total	130,215,000	146,947,000
Roads and Trails for States (10% Fund)	-45,468,547	-40,500,000
Net obligations from appropriated funds	84,746,453	106,447,000

6/ Includes $348,000 for emergency work. In addition, unobligated fiscal year 1973 emergency funds of $942,057 ($50,000 South Dakota returned to SCS) is available.

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

(In President's Budget, Fiscal Year 1975)

Budget Branch
February 7, 1974

Activity	Permanent Positions			Program	Man-Years		
	F.Y. 1974	F.Y. 1975	Inc. or Dec. 1975 over 1974	Inc. or Dec. 1975 over 1974 (in thousands)	Inc. or Dec. 1975 over 1974 Permanent	Other	Total
FOREST PROTECTION AND UTILIZATION:							
FOREST LAND MANAGEMENT:							
National Forest protection and management:							
(1) Timber resource management:							
(a) Sales administration and management	3,538	3,602	64	4,832	64	32	96
(b) Reforestation and stand improvement	712	700	-12	1,986	-12	-4	-16
(2) Recreation-use	1,507	1,508	1	1,852	1	1	2
(3) Wildlife and fish habitat management	343	348	5	536	5	1	6
(4) Rangeland management (includes CRI)	626	626	- -	661	- -	- -	- -
(5) Soil and water management	604	592	-12	-2	-12	-3	-15
(6) Minerals management	160	160	- -	194	- -	- -	- -
(7) Forest fire protection	1,201	1,204	3	159	3	2	5
(8) General land management activities	943	945	2	1,719	2	1	3
Subtotal, National Forest protection and management	(9,634)	(9,685)	(51)	(11,937)	(51)	(30)	(81)
(9) Fighting forest fires	202	202	- -	- -	- -	- -	- -
(10) Forest insect and disease control	281	281	- -	57	- -	- -	- -
(11) Cooperative law enforcement	35	26	-9	-958	-9	- -	-9
Total, Forest Land Management	(10,152)	(10,194)	(42)	(11,036)	(42)	(30)	(72)

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
(In President's Budget, Fiscal Year 1975)

Budget Branch
February 7, 1974

Activity	Permanent Positions			Program	Man-Years		
	F.Y. 1974	F.Y. 1975	Inc. or Dec. 1975 over 1974	Inc. or Dec. 1975 over 1974 (in thousands)	Inc. or Dec. 1975 over 1974 Permanent	Other	Total
FOREST PROTECTION AND UTILIZATION--continued							
FOREST RESEARCH:							
(12) Trees and timber management research	694	694	- -	484	- -	- -	- -
(13) Forest watershed management research	291	291	- -	6	- -	- -	- -
(14) Wildlife, range, and fish habitat research	161	161	- -	-622	- -	- -	- -
(15) Forest recreation research	48	48	- -	-104	- -	- -	- -
(16) Fire and atmospheric sciences research	221	221	- -	220	- -	- -	- -
(17) Forest insects and disease research	458	458	- -	175	- -	- -	- -
(18) Forest products utilization research	444	444	- -	172	- -	- -	- -
(19) Forest engineering research	50	50	- -	46	- -	- -	- -
(20) Forest resources evaluation	166	166	- -	171	- -	- -	- -
(21) Forest economics and marketing research	151	151	- -	121	- -	- -	- -
Total, Forest Research	(2,684)	(2,684)	(- -)	(669)	(- -)	(- -)	(- -)
STATE AND PRIVATE FORESTRY COOPERATION:							
(22) Cooperation in forest fire control	61	61	- -	98	- -	- -	- -
(23) Cooperation in forest tree planting	5	5	- -	1	- -	- -	- -
(24) Cooperation in forest management and processing	32	33	1	522	1	- -	1
(25) General forestry assistance	91	94	3	944	3	- -	3
Total, State and Private Forestry Cooperation	(189)	(193)	(4)	(1,565)	(4)	(- -)	(4)
Total, Forest Protection and Utilization	13,025	13,071	46	13,270	46	30	76
Construction and Land Acquisition:							
(1) Forest land management construction:							
(a) Development of recreation-public use areas	70	54	-16	-2,869	-16	-8	-24
(b) Water resource development construction	23	24	1	81	1	1	2
(c) Construction for fire, administration and other purposes	24	20	-4	-518	-4	-2	-6
(2) Research construction	1	- -	-1	-6,458	-1	- -	-1
(3) Pollution abatement	464	380	-84	-19,625	-84	-28	-112
(4) Land Acquisition, Weeks Act	10	10	- -	275	- -	- -	- -
Total, Construction and Land Acquisition	592	488	-104	-29,114	-104	-37	-141

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
(In President's Budget, Fiscal Year 1975)

Budget Branch
February 7, 1974

Activity	Permanent Positions			Program	Man-Years		
	F.Y. 1974	F.Y. 1975	Inc. or Dec. 1975 over 1974	Inc. or Dec. 1975 over 1974 (in thousands)	Inc. or Dec. 1975 over 1974 Permanent	Other	Total
Forest Roads and Trails (includes R&T 10%)	4,334	4,488	154	16,732	154	90	244
Construction and Operation of Recreation Facilities	96	56	-40	-2,018	-64	-58	-122
Acquisition of Lands for National Forests:							
Special Acts	- -	- -	- -	67	- -	- -	- -
Wasatch National Forest	- -	- -	- -	-236	- -	- -	- -
Uinta National Forest	- -	- -	- -	-95	- -	- -	- -
Cache National Forest	- -	- -	- -	-10	- -	- -	- -
To Complete Land Exchanges	- -	- -	- -	-16	- -	- -	- -
Assistance to States for Tree Planting	14	15	1	223	1	- -	1
Expenses, Brush Disposal	509	507	-2	247	-8	-12	-20
Forest Fire Prevention (Smokey Bear)	3	3	- -	2	- -	- -	- -
Consolidated Working Fund	12	12	- -	- -	- -	- -	- -
Working Capital Fund	765	765	- -	- -	- -	- -	- -
Cooperative Work (Trust Fund)	1,524	1,524	- -	915	- -	- -	- -
Youth Conservation Corps	27	27	- -	1,181	- -	- -	- -
Allocations from other USDA agencies:							
Flood Prevention, SCS	132	111	-21	)	-21	-23	-44
Watershed Works of Improvement, SCS	16	14	-2	) -837	-2	-2	-4
River Basin Surveys and Investigations, SCS	62	65	3	145	3	1	4
Watershed Planning, SCS	20	20	- -	17	- -	- -	- -
Resource Conservation and Development, SCS	3	-	- -	-52	- -	- -	- -
Salaries and Expenses, ARS	8	8	- -	3	- -	- -	- -
Allocations from other Departments and/or Agencies:							
Oregon and California Grant Lands, BLM	21	27	6	524	6	3	9
Land and Water Conservation Fund, BOR	188	200	12	14,247	34	8	42
Manpower Training Activities, DOL	885	891	6	- -	- -	- -	- -
Federal-Aid Highway Trust Fund, FHA	108	6	-102	-6,128	-70	-73	-143
Grand Total, Forest Service	22,344	22,301	-43	9,067	-25	-73	-98

U. S. DEPARTMENT OF AGRICULTURE
Forest Service

(In thousands)

	Unobligated Balance 6/30/73	Unexpended Balance 6/30/73	Unobligated Balance 12/31/73	Unexpended Balance 12/31/73
Forest Protection and Utilization:				
Forest Land Management	$7,828	$47,265	$39,609	$81,507
Forest Research	1,139	10,284	29,619	39,529
State and Private Forestry	158	5,321	20,038	23,866
Total, Forest Protection and Utilization	9,125	62,870	89,266	144,902
Construction and Land Acquisition	26,818	45,802	36,381	52,318
Forest Roads and Trails	279,383	28,428	546,144	70,809
Assistance to States for Tree Planting	110	471	800	1,038
Construction and Operation of Recreation Facilities	- -	- -	2,918	3,126
Acquisition of Lands, Special Acts	- -	7	72	81
Acquisition of Lands to Complete Land Exchanges	- -	- -	55	55
Acquisition of Lands, Cache	11	11	11	11
Acquisition of Lands, Uinta	95	95	67	95
Acquisition of Lands, Wasatch	236	237	217	217
Youth Conservation Corps	2,106	3,304	10,102	10,251
Expenses, Brush Disposal	23,554	26,575	23,005	27,188
Forest Fire Prevention (Smokey Bear)	190	241	181	279
Restoration of Forest Lands and Improvements	18	25	66	69
Working Capital Fund	5,669	13,083	13,408	14,629
Advances and Reimbursements	1,355	1,559	376	580
Cooperative Work (Trust Fund)	81,590	88,286	90,431	94,915
Total, Forest Service Budget	430,260	270,994	813,500	420,563

PERMANENT APPROPRIATIONS

	Appropriation estimate, 1974	Appropriation estimate, 1975	Increase (+) or decrease (-)
Department of Agriculture--Forest Service:			
Payments to States and local governments:			
Payments to States, National Forests Fund (25% Fund)	$113,668,668	$101,200,000	-$12,468,668
Payments to Minnesota (Cook, Lake, and St. Louis Counties)	259,038	259,038	- -
Payments to Counties, National Grasslands	549,000	549,000	- -
Payments to school funds, Arizona and New Mexico	124,307	115,000	-9,307
Subtotal	114,601,013	102,123,038	-12,477,975
Receipts applied to operations: 1/			
Expenses, brush disposal	23,000,000	22,440,000	-560,000
Roads and trails for States (10% Fund)	45,468,547	40,500,000	-4,968,547
Forest fire prevention (Smokey Bear)	250,000	250,000	- -
Restoration of forest lands and improvements	50,000	50,000	- -
Subtotal	68,768,547	63,240,000	-5,528,547
Total, Department of Agriculture--Forest Service	183,369,560	165,363,038	-18,006,522

1/ Excludes appropriation Construction and Operation of Recreation Facilities:
FY 1974 -- $3,277,837
FY 1975 -- $1,260,000

TRUST FUND RECEIPTS

Department of Agriculture--Forest Service Cooperative work	$63,700,000	$67,600,000	+$3,900,000

FOREST PROTECTION AND UTILIZATION

Object Classification (in thousands of dollars)

Identification code 05-96-1100-0-1-402		1973 actual	1974 est.	1975 est.
	FOREST SERVICE			
	Direct obligations:			
	Personnel compensation:			
11.1	Permanent positions	157,895	165,360	168,590
11.3	Positions other than permanent	50,582	47,122	48,190
11.5	Other personnel compensation	19,755	3,535	3,550
11.8	Special personal services payments	4,512	214	220
	Total personnel compensation	232,744	216,231	220,550
12.1	Personnel benefits: Civilian	23,037	23,458	24,025
13.0	Benefits for former personnel	30	20	20
21.0	Travel and transportation of persons	12,278	11,500	11,100
22.0	Transportation of things	13,444	12,500	12,600
23.0	Rent, communications, and utilities	10,073	9,426	20,925
24.0	Printing and reproduction	2,817	2,800	3,020
25.0	Other services	48,244	40,454	40,521
26.0	Supplies and materials	20,333	20,200	18,200
31.0	Equipment	7,353	9,000	7,500
32.0	Lands and structures	2,585	2,600	2,600
41.0	Grants, subsidies, and contributions	24,857	26,349	27,070
42.0	Insurance claims and indemnities	58	60	60
	Subtotal direct obligations	397,853	374,598	388,191
95.0	Quarters and subsistence charges	−1,550	−1,450	−1,250
	Total direct obligations	396,303	373,148	386,941
	Reimbursable obligations:			
	Personnel compensation:			
11.1	Permanent positions	1,914	2,107	2,107
11.3	Positions other than permanent	823	811	811
11.5	Other personnel compensation	591	232	232
11.8	Special personal services payments	79	25	25
	Total personnel compensation	3,407	3,175	3,175
12.1	Personnel benefits: Civilian	253	322	322
21.0	Travel and transportation of persons	271	360	400
22.0	Transportation of things	123	162	200
23.0	Rent, communications, and utilities	171	230	300
24.0	Printing and reproduction	14	20	20
25.0	Other services	2,772	3,800	4,532
26.0	Supplies and materials	596	810	900
31.0	Equipment	89	120	150
32.0	Lands and structures	6	10	10
42.0	Insurance claims and indemnities	1	1	1
	Subtotal reimbursable obligations	7,703	9,010	10,010
95.0	Quarters and subsistence charges	−9	−10	−10
	Total reimbursable obligations	7,694	9,000	10,000
99.0	Total obligations, Forest Service	403,997	382,148	396,941
	ALLOCATION TO DEPARTMENT OF THE INTERIOR			
	Personnel compensation:			
11.1	Permanent positions	168	182	326
11.3	Positions other than permanent	253	291	359
11.5	Other personnel compensation	3	4	5
	Total personnel compensation	424	477	690
12.1	Personnel benefits: Civilian	27	29	42
21.0	Travel and transportation of persons	57	63	106
22.0	Transportation of things	28	34	43
23.0	Rent, communications, and utilities	3	5	5
25.0	Other services	182	257	308
26.0	Supplies and materials	27	30	41
31.0	Equipment	14	17	19
	Total obligations, Department of the Interior	762	912	1,254
99.0	Total obligations	404,759	383,060	398,195

Identification code 05-96-1100-0-1-402	1973 actual	1974 est.	1975 est.
Personnel Summary			
FOREST SERVICE			
Total number of permanent positions	12,927	13,025	13,071
Full-time equivalent of other positions	7,253	6,410	6,440
Average paid employment	18,972	18,019	18,095
Average GS grade	8.5	8.5	8.5
Average GS salary	$13,503	$14,232	$14,232
Average salary of ungraded positions	$10,173	$10,640	$10,640
DEPARTMENT OF THE INTERIOR			
Total number of permanent positions	21	22	38
Full-time equivalent of other positions	39	42	53
Average paid employment	54	59	81
Average GS grade	8.9	8.9	8.9
Average GS salary	$13,978	$14,636	$14,644

CONSTRUCTION AND LAND ACQUISITION

Object Classification (in thousands of dollars)

Identification code 05-96-1103-0-1-402		1973 actual	1974 est.	1975 est.
FOREST SERVICE				
	Direct obligations:			
	Personnel compensation:			
11.1	Permanent positions	7,322	7,539	6,713
11.3	Positions other than permanent	1,656	1,813	1,602
11.5	Other personnel compensation	191	204	180
11.8	Special personal services payments	4	---	---
	Total personnel compensation	9,173	9,556	8,495
12.1	Personnel benefits: Civilian	857	911	796
13.0	Benefits for former personnel	11	10	---
21.0	Travel and transportation of persons	400	480	275
22.0	Transportation of things	311	600	310
23.0	Rent, communications, and utilities	244	450	707
24.0	Printing and reproduction	49	100	50
25.0	Other services	4,243	6,223	2,709
26.0	Supplies and materials	1,165	3,500	1,000
31.0	Equipment	1,157	3,500	1,000
32.0	Lands and structures	10,827	25,185	8,825
42.0	Insurance claims and indemnities	3	---	---
	Subtotal	28,440	50,515	24,167
95.0	Quarters and subsistence charges	−20	−25	−20
	Total direct obligations	28,420	50,490	24,147
	Reimbursable obligations:			
25.0	Other services	204	250	250
	Total obligations, Forest Service	28,624	50,740	24,397
	GENERAL SERVICES ADMINISTRATION			
21.0	Travel and transportation of persons	9	9	---
24.0	Printing and reproduction	---	6	---
25.0	Other services	32	365	---
32.0	Lands and structures	781	1,076	---
	Total obligations, General Services Administration	822	1,456	---
99.0	Total obligations	29,446	52,196	24,397
	Personnel Summary			
	Total number of permanent positions	595	592	488
	Full-time equivalent of other positions	219	236	199
	Average paid employment	745	759	618
	Average GS grade	8.5	8.5	8.5
	Average GS salary	$13,503	$14,232	$14,232
	Average salary of ungraded positions	$10,173	$10,640	$10,640

Youth Conservation Corps

Object Classification (in thousands of dollars)

Identification code 05-96-1125-0-1-402		1973 actual	1974 est.	1975 est.
	FOREST SERVICE			
	Personnel compensation:			
11.1	Permanent positions	165	330	355
11.3	Positions other than permanent	311	532	561
11.5	Other personnel compensation	135	258	260
11.8	Special personal services payments	339	521	550
	Total personnel compensation	950	1,641	1,726
12.1	Personnel benefits: Civilian	68	115	124
21.0	Travel and transportation of persons	33	70	70
22.0	Transportation of things	78	130	150
23.0	Rent, communications, and utilities	26	115	135
24.0	Printing and reproduction	3	3	5
25.0	Other services	327	350	795
26.0	Supplies and materials	147	300	500
31.0	Equipment	10	110	125
41.0	Grants, subsidies, and contributions	107	1,424	1,500
42.0	Insurance claims and indemnities	1	---	---
	Subtotal	1,750	4,258	5,130
95.0	Quarters and subsistence charges	−9	−10	−10
	Total obligations, Forest Service	1,741	4,248	5,120
	ALLOCATION TO DEPARTMENT OF THE INTERIOR			
	Personnel compensation:			
11.1	Permanent positions	59	123	142
11.3	Positions other than permanent	191	433	488
	Total personnel compensation	250	556	630
12.1	Personnel benefits: Civilian	50	112	119
21.0	Travel and transportation of persons	87	120	123
22.0	Transportation of things	2	3	2
23.0	Rent, communications, and utilities	11	27	28
24.0	Printing and reproduction	5	12	8
25.0	Other services	1,198	2,327	2,520
26.0	Supplies and materials	145	166	128
31.0	Equipment	2	4	2
41.0	Grants, subsidies, and contributions	---	1,424	1,500
	Total obligations, Department of the Interior	1,750	4,751	5,060
99.0	Total obligations	3,491	8,999	10,180

Personnel Summary

FOREST SERVICE			
Total number of permanent positions	14	27	27
Full-time equivalent of other positions	42	73	73
Average paid employment	56	100	100
Average GS grade	8.5	8.5	8.5
Average GS salary	$13,503	$14,232	$14,232
Average salary of ungraded positions	$10,173	$10,640	$10,640
ALLOCATION TO DEPARTMENT OF THE INTERIOR			
Total number of permanent positions	4	8	8
Full-time equivalent of other positions	40	80	80
Average paid employment	44	88	88
Average GS grade	9.3	9.5	9.5
Average GS salary	$14,217	$15,375	$15,375
Average salary of ungraded positions	$7,630	$7,630	$7,630

FOREST ROADS AND TRAILS (LIQUIDATION OF CONTRACT AUTHORITY)

Object Classification (in thousands of dollars)

Identification code 05-96-2262-0-1-402		1973 actual	1974 est.	1975 est.
	FOREST SERVICE			
	Direct obligations:			
	Personnel compensation:			
11.1	Permanent positions	55,549	53,154	56,000
11.3	Positions other than permanent	24,718	21,945	23,030
11.5	Other personnel compensation	1,887	1,694	1,750
11.8	Special personal services payments	5	1	1
	Total personnel compensation	82,159	76,794	80,781
12.1	Personnel benefits: Civilian	7,732	7,129	7,628
13.0	Benefits for former personnel	23	15	20
21.0	Travel and transportation of persons	3,108	2,715	2,535
22.0	Transportation of things	6,532	4,495	5,325
23.0	Rent, communications, and utilities	3,093	2,065	6,328
24.0	Printing and reproduction	473	400	385
25.0	Other services	16,809	10,866	13,715
26.0	Supplies and materials	7,267	5,300	5,925
31.0	Equipment	3,109	2,000	2,535
32.0	Lands and structures	26,353	18,000	21,490
42.0	Insurance claims and indemnities	65	60	50
44.0	Refunds	7	---	---
	Subtotal, direct obligations	156,730	129,839	146,717
95.0	Quarters and subsistence charges	−325	−275	−300
	Total direct obligations	156,405	129,564	146,417
	Reimbursable obligations:			
	Personnel compensation:			
11.1	Permanent positions	107	212	215
11.3	Positions other than permanent	28	100	100
11.5	Other personnel compensation	2	5	5
	Total personnel compensation	137	317	320
12.1	Personnel benefits: Civilian	12	22	22
21.0	Travel and transportation of persons	9	25	25
22.0	Transportation of things	6	100	100
23.0	Rent, communications, and utilities	6	100	100
25.0	Other services	29	436	633
26.0	Supplies and materials	38	400	600
31.0	Equipment	6	100	100
32.0	Lands and structures	29	100	100
	Total reimbursable obligations	272	1,600	2,000
	Total obligations, Forest Service	156,677	131,164	148,417
	DEPARTMENT OF TRANSPORTATION			
	Personnel compensation:			
11.1	Permanent positions	158	55	58
11.3	Positions other than permanent	24	25	26
11.5	Other personnel compensation	14	14	14
	Total personnel compensation	196	94	98
12.1	Personnel benefits: Civilian	17	8	8
21.0	Travel and transportation of persons	54	54	54
22.0	Transportation of things	11	11	11
23.0	Rent, communications, and utilities	6	6	6
24.0	Printing and reproduction	1	1	1
25.0	Other services	165	165	165
26.0	Supplies and materials	2	2	2
32.0	Lands and structures	636	310	185
	Total obligations, Department of Transportation	1,088	651	530
99.0	Total obligations	157,765	131,815	148,947

FOREST ROADS AND TRAILS (LIQUIDATION OF CONTRACT AUTHORITY)—Continued

Identification code 05-96-2262-0-1-402	1973 actual	1974 est.	1975 est.
Personnel Summary			
FOREST SERVICE			
Total number of permanent positions	4,608	4,334	4,488
Full-time equivalent of other positions	3,322	2,819	2,909
Average paid employment	7,634	6,769	7,013
Average GS grade	8.5	8.5	8.5
Average GS salary	$13,503	$14,232	$14,232
Average salary of ungraded positions	$10,173	$10,640	$10,640
DEPARTMENT OF TRANSPORTATION			
Total number of permanent positions	12	4	4
Full-time equivalent of other positions	4	4	4
Average paid employment	16	8	8
Average GS grade	8.2	8.2	8.2
Average GS salary	$13,918	$14,763	$15,214

ASSISTANCE TO STATES FOR TREE PLANTING

Object Classification (in thousands of dollars)

Identification code 05-96-1101-0-1-402		1973 actual	1974 est.	1975 est.
	Personnel compensation:			
11.1	Permanent positions	170	233	250
11.3	Positions other than permanent	5	8	8
	Total personnel compensation	175	241	258
12.1	Personnel benefits: Civilian	20	26	27
21.0	Travel and transportation of persons	15	22	25
22.0	Transportation of things	6	2	2
23.0	Rent, communications, and utilities	20	27	29
24.0	Printing and reproduction	----------	4	11
25.0	Other services	88	91	196
26.0	Supplies and materials	−1	8	15
31.0	Equipment	2	2	3
41.0	Grants, subsidies, and contributions	699	700	780
99.0	Total obligations	1,024	1,123	1,346
	Personnel Summary			
	Total number of permanent positions	14	14	15
	Full-time equivalent of other positions	1	1	1
	Average paid employment	12	16	17
	Average GS grade	8.5	8.5	8.5
	Average GS salary	$13,503	$14,232	$14,232
	Average salary of ungraded positions	$10,173	$10,640	$10,640

Construction and Operation of Recreation Facilities

Object Classification (in thousands of dollars)

Identification code 05-96-5009-0-2-402		1973 actual	1974 est.	1975 est.
	Personnel compensation:			
11.1	Permanent positions		1,295	500
11.3	Positions other than permanent		724	285
11.5	Other personnel compensation		28	10
	Total personnel compensation		2,047	795
12.1	Personnel benefits: Civilian		189	75
21.0	Travel and transportation of persons		70	25
22.0	Transportation of things		150	55
23.0	Rent, communications, and utilities		55	20
24.0	Printing and reproduction		10	5
25.0	Other services		332	125
26.0	Supplies and materials		310	115
31.0	Equipment		80	30
32.0	Lands and structures		35	15
99.0	Total obligations		3,278	1,260

Personnel Summary

Total number of permanent positions		96	56
Full-time equivalent of other positions		95	37
Average paid employment		199	77
Average GS grade		8.5	8.5
Average GS salary		$14,232	$14,232
Average salary of ungraded positions		$10,640	$10,640

Forest Service Permanent Appropriations

Object Classification (in thousands of dollars)

Identification code 05-96-9999-0-2-402		1973 actual	1974 est.	1975 est.
	Personnel compensation:			
11.1	Permanent positions	5,224	5,956	5,977
11.3	Positions other than permanent	5,382	6,820	6,855
11.5	Other personnel compensation	1,079	1,288	1,275
11.8	Special personal services payments	4	4	5
	Total personnel compensation	11,689	14,068	14,112
12.1	Personnel benefits: Civilian	898	1,091	1,102
21.0	Travel and transportation of persons	190	240	225
22.0	Transportation of things	969	1,225	1,225
23.0	Rent, communications, and utilities	668	860	1,000
24.0	Printing and reproduction	21	30	30
25.0	Other services	36,875	51,652	46,782
26.0	Supplies and materials	819	1,060	1,060
31.0	Equipment	570	465	465
32.0	Lands and structures	178	200	200
41.0	Grants, subsidies, and contributions	85,558	114,601	102,123
42.0	Insurance claims and indemnities	6	3	3
	Subtotal	138,441	185,495	168,327
95.0	Quarters and subsistence charges	−132	−100	−130
99.0	Total obligations	138,309	185,395	168,197

Personnel Summary

Total number of permanent positions	478	518	510
Full-time equivalent of other positions	785	947	935
Average paid employment	1,217	1,397	1,377
Average GS grade	8.5	8.5	8.5
Average GS salary	$13,503	$14,232	$14,232
Average salary of ungraded positions	$10,173	$10,640	$10,640

Working Capital Fund

Object Classification (in thousands of dollars)

Identification code 05-96-4605-0-4-402		1973 actual	1974 est.	1975 est.
	Personnel compensation:			
11.1	Permanent positions	7,910	7,892	7,895
11.3	Positions other than permanent	3,033	3,155	3,155
11.5	Other personnel compensation	257	298	300
11.8	Special personal services payments	−8	−3	
	Total personnel compensation	11,192	11,342	11,350
12.1	Personnel benefits: Civilian	983	1,018	1,020
13.0	Benefits for former personnel	3		
21.0	Travel and transportation of persons	214	220	250
22.0	Transportation of things	132	150	200
23.0	Rent, communications, and utilities	509	585	600
24.0	Printing and reproduction	66	45	75
25.0	Other services	3,576	2,047	2,140
26.0	Supplies and materials	9,597	9,935	10,000
31.0	Equipment	8,306	10,030	12,000
32.0	Lands and structures	27	40	50
41.0	Grants, subsidies, and contributions	2	3	5
42.0	Insurance claims and indemnities	1	1	1
44.0	Refunds	1		
	Subtotal	34,609	35,416	37,691
95.0	Quarters and subsistence charges	−37	−20	−20
99.0	Total obligations	34,572	35,396	37,671

Personnel Summary

Total number of permanent positions	788	765	765
Full-time equivalent of other positions	376	362	362
Average paid employment	1,057	1,000	1,000
Average GS grade	8.5	8.5	8.5
Average GS salary	$13,503	$14,232	$14,232
Average salary of ungraded positions	$10,173	$10,640	$10,640

Consolidated Working Fund

Object Classification (in thousands of dollars)

Identification code 05-96-3911-0-4-402		1973 actual	1974 est.	1975 est.
	Personnel compensation:			
11.1	Permanent positions	121	165	165
11.5	Other personnel compensation	1	2	2
11.8	Special personal services payments	1,442	1,868	1,803
	Total personnel compensation	1,564	2,035	1,970
12.1	Personnel benefits: Civilian	96	125	120
21.0	Travel and transportation of persons	19	25	25
22.0	Transportation of things	29	60	60
23.0	Rent, communications, and utilities	3	5	5
25.0	Other services	69	146	130
26.0	Supplies and materials	11	25	25
31.0	Equipment	2	5	5
99.0	Total obligations	1,793	2,426	2,340

Personnel Summary

Total number of permanent positions	9	12	12
Average paid employment	9	12	12
Average GS grade	8.5	8.5	8.5
Average GS salary	$13,503	$14,232	$14,232
Average salary of ungraded positions	$10,173	$10,640	$10,640

COOPERATIVE WORK (TRUST FUND)

Object Classification (in thousands of dollars)

Identification code 05-96-8028-0-7-402		1973 actual	1974 est.	1975 est.
	Personnel compensation:			
11.1	Permanent positions	14,375	17,482	17,794
11.3	Positions other than permanent	10,049	11,635	11,840
11.5	Other personnel compensation	808	878	878
11.8	Special personal services payments	5	1	1
	Total personnel compensation	25,237	29,996	30,513
12.1	Personnel benefits: Civilian	2,162	2,605	2,646
13.0	Benefits for former personnel	1	2	2
21.0	Travel and transportation of persons	358	475	475
22.0	Transportation of things	1,909	2,200	2,200
23.0	Rent, communications, and utilities	911	1,100	1,457
24.0	Printing and reproduction	53	100	100
25.0	Other services	7,714	10,285	10,285
26.0	Supplies and materials	4,702	6,000	6,000
31.0	Equipment	773	900	900
32.0	Lands and structures	4,549	6,100	6,100
41.0	Grants, subsidies, and contributions	2	.....	.....
42.0	Insurance claims and indemnities	45	.....	.....
44.0	Refunds	67	55	55
	Subtotal	48,483	59,818	60,733
95.0	Quarters and subsistence charges	−210	−210	−210
99.0	Total obligations	48,273	59,608	60,523

Personnel Summary

Total number of permanent positions	1,305	1,524	1,524
Full-time equivalent of other positions	1,418	1,570	1,570
Average paid employment	2,630	2,997	2,997
Average GS grade	8.5	8.5	8.5
Average GS salary	$13,503	$14,232	$14,232
Average salary of ungraded positions	$10,173	$10,640	$10,640

MISCELLANEOUS ACCOUNTS

Appropriation: Object Classification	1973 actual	1974 est.	1975 est.
	(in thousands of dollars)		
Acquisition of Lands for National Forests, Special Acts:			
32.0 Lands and structures	58	94	161
Acquisition of Lands to Complete Land Exchange:			
32.0 Lands and structures	.....	55	39
Cooperative Range Improvements:			
25.0 Other services	700	700	700
Other General Funds:			
32.0 Lands and structures	8	157	.....

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

HEALTH SERVICES ADMINISTRATION

Indian Health

Appropriation by Activity	1975 Appropriation Estimate
1. Indian Health Services	$222,896,000
2. Construction	54,956,000
3. Program Management	3,147,000
Administrative Provisions	

HIGHLIGHT STATEMENT

INTRODUCTION

The goal of the Indian Health Service is to raise the health status of the Indian and Alaska Native people to the highest level possible. In pursuing the achievement of this goal the Indian Health Service provides care through a comprehensive health services delivery system, which provides for tribal involvement in program development and implementation. Additionally, the Indian Health Service performs the function of principal Federal advocate for assuring that Indians have knowledge and access to all Federal, State and local health programs to which they are entitled as American citizens. In addition, the Indian Health Service is assisting Indian communities to strengthen their capacities to man and manage their own individual and institutional health affairs at such a pace as they themselves choose.

Guided by the principles contained in President Nixon's Indian Message of July 8, 1970, transmitting recommendations on Indian policy and supported by sustained follow-through on the part of the Administration, substantial progress has been made in pursuit of these aims. Illustrative of the conversion of purpose into deeds are meaningful and much-needed expansions of several programs. Included are efforts relating to ambulatory, dental, eye and contract care; projects to assist urban Indian people to identify and obtain health services available to them as citizens; and the Community Health Representative Program and other tribally managed efforts carried out through contracts with the Indian Health Service. Progress has been made, too, in upgrading, through construction, the physical plant so essential to the provision of good health services, and to increasing the safety of the key water and waste disposal aspects of the human environment.

Encouraged by this progress, we are seeking permission to solidify these gains and to pursue further progress. The FY 1975 request, therefore, proposes increases for the highly fruitful ANCHAT and ambulatory care programs and staffing of the Tuba City hospital, currently under construction. Proposed, too, are construction funds for the much needed replacement hospital at Claremore, Oklahoma; for health centers at Tohatchi, New Mexico and Riverside, California; and to continue progress against the hazards presented by unsafe water and waste disposal facilities in Indian homes and communities. Construction of medical facilities initiated in 1973 and 1974 is being continued.

The programs conducted by the Indian Health Service encompass delivery systems involving direct, contract and alternate health services which provide comprehensive health care to approximately 498,000 American Indians and Alaska Natives. The great majority of Indians live in remote and isolated rural areas where accessibility to health care is extremely difficult, and Indian Health Service facilities are the only ones available in many cases.

The Services provided through this program have contributed substantially to the continued improvements in the health of Indians and Alaska Natives since 1955, when the Department assumed responsibility for Indian Health care. However, the current health status of Indians is still deficient when measured against that of the general population. These people still live for the most part under severe deprivation caused by the extreme physical hardships of their home environment, characterized by gross unsanitary living conditions, sub-standard and crowded housing, and unsafe water supplies; they also suffer from inadequate nutrition, limited educational opportunities, emotional, and sociological problems brought about by a culture in transition.

In spite of very substantial program achievements, morbidity and mortality among Indians remains considerably higher than in the general population. Significant strides have been made in recent years, particularly in the prevention of infant deaths and deaths from tuberculosis. However, the environment, both physical and economic, in which the Indians find themselves, predisposes them to the ravages of disease to a far greater degree than found in the general population.

Direct health services will be provided to Indians, Eskimos, and Aleuts in Fiscal Year 1975 in 51 hospitals, 83 health centers (including 26 school health centers) and several hundred other health stations. This program consists of a Field Health component including sanitation and dental care, public health nursing, health education and field medical services which bring health services for Indians and Alaska Natives directly to homes and communities.

Health centers and stations are carefully located to conveniently provide as complete a range of health services to Indian communities as possible. These clinic based services are supplemented by home visits providing preventive and curative health services in combination with education in good health care and practice. Included are such activities as mental health, alcoholism, nutrition, maternal and child health and family planning. This program of direct care is supplemented through contractual arrangements with public and private health practitioners and institutions, including tribal governments, in those situations where it is considered to be the most feasible, effective, efficient, and accessible method of providing the highest quality of care.

Indians are, first of all, citizens of this country and of the States in which they reside. Hence, they are also eligible to participate in, all the general population-oriented public and private health programs on the same basis as any other citizen. As the principal Federal advocate in the health field for Indians, the Indian Health Service encourages Indians to become fully aware of, and full participants in all health programs for which they qualify. It also helps to stimulate the efforts of other health programs towards greater outreach for Indians.

The Message from the President of the United States Transmitting Recommendations for Indian Policy (House Document No. 91-363 dated July 8, 1970) stressed Indian self-determination. Toward this end, the Indian Health Service is assisting Indian communities to strengthen their capacities to man and manage their own individual and institutional health affairs. The Indians themselves have, for a considerable period of time, been participating, in varying degrees, in the planning, operation, and evaluation of their programs. While avenues for this Indian participation have been provided since 1934, it has only been in the last several years that tribal councils, tribal health boards and advisory committees have become a potent mechanism for providing increasing Indian involvement.

There follows a discussion of areas of particular concern:

1. Mortality

The latest available age adjusted mortality rates for Indians and Alaska Natives (1972) and for U.S. all races (1969) show that the rates for Indians and Alaska Natives are considerable higher than the general population, except for heart disease, maligant nepolasms, vascular lesions, and certain diseases of early infancy. The higher ratios are as follows:

	Mortality Ratios Indians to U.S. All Races
All causes of death per 100,000 population	1.2
Infant deaths	1.1
Accidents	3.3
Influenza and Pneumonia	1.6
Cirrhosis of liver	4.3
Homicide	3.0
Diabetes	2.0
Suicide	1.8
Tuberculosis, all forms	4.7

As indicated above in 1972 the Indian and Alaska Native infant death rate of 20.9 per 1,000 live births was about 1.1 times as high as the provisional U.S. all races rate of 18.5. The Indian and Alaska Native post neonatal rate is more than twice the U.S. rate. This high rate results from the infant leaving the hospital and returning the complex problems that accompany a poverty stricken environment.

Approximately one-fifth of all Indian and Alaska Native deaths in 1972 were due to accidents; one-fourth, to diseases of the heart and neoplasms; and one-tenth, to infectious, parasitic, and respiratory diseases.

2. Morbidity

Infectious Diseases--Large numbers of episodes of illness requiring inpatient or outpatient care are due to infectious diseases and their after-effects. These diseases include gastroenteritis, dysentery, influenza, tuberculosis, otitis media, trachoma, pneumonia, and common childhood communicable diseases.

3. Alcoholism--Many Indian communities have been deeply concerned for years about the problems of alcohol abuse and suicide. Many suicides and abortive suicide attempts occur as part of episodes of drunkenness. The suicide rate among Indian and Alaska Natives in the 15-34 year age group is 3.6 times as high as the U.S.

all races rate in the same age group. There is scarcely an Indian group which does not consider alcohol misuse one of its most important problems. Many Indian people at one time or another seriously damage themselves (a large number are actually killed in traffic accidents) through the effects of intermittent intoxication. What is particularly alarming about both these problems is that they appear to be increasing and to be affecting primarily young people.

4. Mental Health--American Indians, like all groups, suffer from difficulties in living, ranging from severe psychosis to general discouragement and apathy. As with any group, psychiatric assistance can be of value in improving and preventing these conditions. Unless such assistance is given, these problems continue, and manifest themselves as self-destructive drinking, suicide, violence, family disorganization, child abuse or neglect, and apparent physical disability without physical cause. Indian cultures in the past have had their own ways of coping with mental illness, but unfortunately many of these mechanisms have broken down due to changes in the Indian's way of life. The objective of the Indian Health Service mental health program is to keep Indian people mentally healthy and to draw upon the inherent strengths of Indian culture and heritage by reinforcing and rebuilding the positive influence which this Indian culture imparts to the individual. To accomplish this objective, the staff of the mental health program includes and uses Indian community mental health workers. These workers help bridge the gap between the professional and the patient and the community in many areas, such as patient identification and follow-up. They also help to change Indian and non-Indian community attitudes, as well as to assist in training the non-Indian professional staff. The maintenance of a high level of mental health is essential in raising the general health standards of the Indian people.

5. Maternal and Child Health--Maternal and Child Health Services continues to contribute to a significant improvement in the health of Indian and Alaska Native mothers and children. Maternal mortality has continued to decline from 82.6 per 100,000 live births in 1958 to 37.9 in 1972. Infant mortality has been reduced from 62.5 per 1,000 live births in 1955 to 20.9 in 1972. This overall infant mortality rate is approaching the U.S. all races rate of 18.5. In 1972 the neonatal (up to 28 days of age) mortality rate of 9.6 per 1,000 live births was below the provisional U.S. General population rate of 13.7. The use of indigenous Indian health workers together with the inception over the last four years of special community maternal and child health family planning projects through contracts with tribes is a contributing factor in allowing the program to show continual improvement in this area.

6. Dental Health--Oral conditions such as caries, periodontal disease, orthodontic problems and missing teeth are chronic, ubiquitous and persistent. Indian people consistently rank dental health first, second or third in health priority. Frustration is common because the conditions are obvious,

the means of prevention and correction known and, where resources permit, the Indian Health Service organization is capable of effective and rapid response to the desires of each community.

The Indian Health Service dental program has demonstrated a high order of efficiency and effectiveness. It also is a leader in the dental profession in areas of national concern such as quality evaluation, resource planning and the development of auxiliary personnel.

Among children, where services are concentrated, tooth mortality has steadily declined in relation to infected teeth. Orthodontic conditions have also steadily improved among the young. The young still have a large reservoir of corrective service needs and adults remain without most oral health services.

7. Nutrition—Insufficient food and economic resources to provide nutritionally adequate diets, coupled with a lack of knowledge of the relationship of food to health, continue to pose a major problem among Indian and Alaska Native families. Infants, preschool children, pregnant and lactating women and all females in the childbearing years (15-44), as well as the aged and chronically ill, are groups at nutritional risk. Malnutrition and mild-to-moderately severe nutritional deficiencies occur relatively frequently in Indian and Alaska Natives. Malnutrition occurs per se and as a complicating or contributing factor in a wide variety of other health problems and illnesses. These include under achievement in physical growth and development (sometimes called failure to thrive), nutritional anemia, infectious and chronic diseases, maternal morbidity, infant morbidity and mortality, and significant underweight or overweight conditions.

Appropriation, 1973 (adjusted)		$220,090,073
Total Amount Available		220,090,073
Appropriation, 1974	$234,210,000	
Transferred to other accounts (GSA)	- 117,899	
Comparative transfer to "Working Capital Fund, Office of the Secretary"	- 34,000	
Comparative transfer from "Office of Assistant Secretary for Health", for Commissioned Officer Personnel Functions	+ 205,000	
1974 Proposed transfer for Increased Pay Cost	+9,410,000	
1974 Proposed Supplemental for Contract Health Care, Alaska Native Community Health Aide and Ambulatory Care	+6,591,000	
Total amount available, 1974		250,264,101

Indian Health Summary of Increases and Decreases, 1975

1. Indian Health Services To provide for mandatory increases for Patient Care ($14,416,899) and Field Health ($7,884,000); program increases for Patient Care at Indian Health Service facilities ($2,315,000) and Field Health at Indian Health Service facilities ($935,000)	+25,550,899
Net Change	+25,550,899

2. Construction

To provide for mandatory increases in Sanitation Facilities ($4,342,000); net program increase in Health Facilities ($687,000)	+ 5,029,000
Net Change	+ 5,029,000

3. Program Management

To provide for mandatory increase	+ 155,000
Net Change	+ 155,000
Net Change, 1975	+30,734,899
Budget Estimate, 1975	280,999,000

Analysis by Activity

Activity	Amount Available 1973 (Actual)	Amount Available 1974	Estimate 1975	Increase (+) Decrease (-)
1. Indian Health Service				
a. Patient Care	119,321,952	136,521,101	153,253,000	+16,731,899
b. Field Health Service	53,360,748	60,824,000	69,643,000	+ 8,819,000
2. Construction	43,102,579	49,927,000 1/	54,956,000 1/	+ 5,029,000
3. Program Management	2,726,127	2,992,000	3,147,000	+ 155,000
Total	218,511,406	250,264,101	280,999,000	+30,734,899

1/ NOA

HEALTH SERVICES ADMINISTRATION
INDIAN HEALTH SERVICES

Appropriated, 1973 (adjusted)		$175,541,073
Total amount available		175,541,073
Appropriation, 1974	$184,283,000	
Transferred to other accounts (GSA)	-117,899	
Comparative transfer to "Working Capital Fund, Office of the Secretary"	-34,000	
Comparative transfer from "Office of Assistant Secretary for Health", for Commissioned Officer Personnel Functions	+205,000	
1974 Proposed transfer for Increased Pay Cost	+9,410,000	
1974 Proposed Supplemental for Contract Health Care, Alaska Native Community Health Aide & Ambulatory Care	+6,591,000	
Total amount available, 1974		200,337,101

Summary of Increases and Decreases, 1975

Patient Care	
To provide for mandatory increases for direct care at Indian Health Service facilities ($9,988,899) and indirect care ($4,428,000); program increases for direct care at Indian Health Service facilities ($2,315,000)	+16,731,899
Net Change	+16,731,899
Field Health Services	
To provide for mandatory increases for sanitation ($292,000), dental ($469,000), public health nursing ($188,000), health education ($67,000), and field medical services ($6,868,000); program increases for field medical services at Indian Health Service facilities ($935,000)	+ 8,819,000
Net Change	+ 8,819,000
Program Management	
To provide for mandatory increase	+ 155,000
Net Change	+ 155,000
Net Change, 1975	+25,705,899
Budget Estimate, 1975	226,043,000

Analysis by Activities

	Amount Available 1973	Amount Available 1974	Estimate 1975	Increase (+) Decrease (-)
Patient care	$119,321,952 2/	$136,521,101	$153,253,000	+$16,731,899
Field Health Services	53,360,748	60,824,000	69,643,000	+ 8,819,000
Program Management	2,726,127	2,992,000	3,147,000	+ 155,000
Sub-Total - Obligations ...	175,408,827 3/	200,337,101 3/	226,043,000	+ 25,705,899
Unobligated Balance Lapsing	132,246	---	---	
Budget Authority	175,541,073 1/	200,337,101 1/	226,043,000 1/	+ 25,705,899

1. Patient Care

	Amount Available 1973	Amount Available 1974	Estimate 1975	Increase (+) Decrease (-)
(a) Direct - Operation of IHS Hospitals:				
Positions	4,835	4,963	5,206	+ 243
Amount	86,395,732	95,888,101	108,192,000	+ 12,303,899
(b) Indirect - Contractual:				
Positions	40	40	40	---
Amount	32,926,220	40,633,000	45,061,000	+ 4,428,000
Total Patient Care:				
Positions	4,875	5,003	5,246	+ 243
Amount	119,321,952	136,521,101	153,253,000	+ 16,731,899

1/ Excludes reimbursements as follows: FY-1973 - $1,441,529 (PC $1,328,809; FH $112,720); FY- 1974 - $1,715,000 (PC $1,602,000; FH $113,000); FY-1975 - $1,715,000 (PC $1,602,000; FH $113,000).

2/ Reflects a 1974 comparative transfer, - $13,000; to "Departmental Management, Office of the Secretary".

3/ Reflects a 1975 Comparative Transfer $+205,000 "Office of Assistant Secretary for Health" for Commissioned Officer Personnel Functions; reflects a 1975 Comparative Transfer - $34,000 to "Departmental Management, Office of the Secretary".

1. Patient Care
Summary of Change

INCREASES	
Mandatory:	
Within Grade Promotions	$1,168,000
Full-Year Cost of 1974 Increased Pay Cost	769,000
Full-Year Cost of 1974 Wageboard Increases	475,000
Increased Cost of Contractual Services	400,000
Increased Cost of Supplies	519,000
Increased Cost of Maintenance and Repair	462,000
Operation of Newly Constructed Facilities:	
Staffing of Tuba City Hospital (171 Positions)	247,000
Groups II and III Equipment for Zuni Hospital	648,000
Increased Cost of Medical Care under Contract	4,402,000
One Additional Paid Day	203,000
Increased Payments for BEC, Service and Supply Fund, Working Capital Fund and FTS Charges	393,000
GSA Payment	3,412,899
Continuation of California Rural Indian Health Board, Appropriated in 1973	1,177,000
Increased Requirements Resulting from 1974 Program Increases for Ambulatory Care	116,000
Funding of Programs previously funded by DOL	1,000,000
Total Increases Mandatory	15,391,899
Program	
Ambulatory Care for Hospital Outpatient Departments (72 positions)	2,315,000
Total Increases	17,706,899
DECREASES	
Mandatory	
Equipment for New Constructed Facilities in 1974	-975,000
Total Decreases	-975,000
Net Increase (243 Positions)	16,731,899

(a) Direct -- The 1975 estimate of 5,206 positions and $108,192,000 provides an increase of 243 positions and $12,303,899 over the 1974 estimate of 4,963 positions and $95,888,101.

Need for Increase

The requested increase consists of:

Increase	
Mandatory:	
Statutory salary promotions	$ 1,150,000
Full-year cost of 1974 increased pay cost	764,000
Full-year cost of 1974 wage-board increases	475,000
Increased cost of contractual services	400,000
Increased cost of supplies	519,000
Increased cost of maintenance and repair	462,000
Operation of newly constructed facilities:	
Staffing of Tuba City hospital (171 positions)	247,000
Equipment for Zuni hospital	648,000
One additional paid day	200,000
Increased payments for BEC, Service and Supply Fund, working capital fund, and FTS charges	393,000
GSA payment	3,412,899
Continuation of California Rural Indian Health Board, appropriated in 1973	1,177,000
Increased requirements resulting from 1974 program increase for ambulatory care	116,000
Funding of programs previously funded by the Department of Labor	1,000,000
Sub-Total Mandatory Increases	10,963,899
Program:	
Ambulatory Care for Hospital Outpatient Departments (72 Positions)	2,315,000
Total Increases	13,278,899
Decreases:	
Equipment for newly constructed facilities, appropriated in 1974	- 975,000
Net Increase	12,303,899

Ambulatory Patient Care - 72 Positions and $2,315,000

The provision of comprehensive community health services has not only become more complex, but it has also produced a significant change in the inpatient and outpatient workloads. A significant trend in the Indian Health program has been the increased utilization of ambulatory services. Increased emphasis on preventive rather than curative medicine has also been a factor resulting in substantial increases in the outpatient workload in the past few years. From Fiscal Year 1955 through 1974, Indian Health Service hospital admissions (excluding births) increased 1.8 times, from 42,762 to 74,600 and hospital outpatient visits increased 4 times, from 355,000 to 1,400,000. The service population has also been increasing, from 318,000 to 498,000, although not as rapidly as the utilization rate.

Advances made in the delivery of routine diagnostic, curative, and preventive services coupled with the increased acceptance by the Indians of the program have resulted in a substantial increase in the number of ambulatory services provided at the hospital and field clinics. The partnership for health that has evolved between the Indian Health Service and the Indian communities it serves has also significantly contributed to the increased use of Indian Health services. This partnership has been evidenced by joint planning and evaluation of health services, by Indian groups building and leasing health facilities to the Indian Health Service, and the assumption by Indians of the management of many aspects of their health programs. Indian community concern was further evidenced recently when the National Tribal Chairmen's Association (NTCA) and the National Indian Health Board (NIHB) placed the need for ambulatory care services both in their facilities and in the contract program as their top priority need.

A number of factors have impacted heavily on the Indian Health Service's ability to provide the quality and quantity of ambulatory services required by the Indian communities served. The addition of $2,315,000 for FY 1975 to the Indian Health Service budget will assist in providing additional services to the Indian people.

Plan of Work

The Indian Health Service operates a network of 51 hospitals ranging in size from 6 to 276 beds and varies in program complexity from primary medical care to comprehensive referral services.

There will be continuing emphasis and effort in 1975 toward implementing the standards promoted by the Joint Commission on Accreditation of Hospitals.

As a result of Administration and Congressional support in the past several years, both the quality and quantity of the inpatient and outpatient programs have been improved. Additional ambulatory care positions, upgrading of hospital and outpatient facilities and increases in the clinical laboratory capabilities have resulted in a more acceptable and responsive health program. Hospital outpatient facilities are experiencing a continued increase in the demand for services.

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In addition to ambulatory care, the 1975 request of $108,192,000 for direct care, operation of Indian Health Service hospitals, includes the funding of, (1) the operation of 51 Indian Health Service hospitals and attached outpatient clinics and (2) the maintenance of Indian Health Service facilities consisting of hospitals, health centers, stations, school clinics, and staff quarters and (3) an increase of $247,000 for 171 new positions required to staff the new Tuba City Hospital which will be completed during FY 1975.

Also, the 1975 appropriation request includes $1,350,000 to fund programs formerly made possible as a result of Department of Labor (DOL) funds being used to support IHS training programs. DOL funds made available to IHS through 1974, pursuant to the President's recommendation for Indian policy, (House document 91-363) will not be available in 1975. The funds requested for 1975 will be used to continue medical programs including otitis media, TB surveillance by the Navajo Tribe and Medical Care at Skills Centers. Of the above amount, $1,000,000 is included in this sub-activity and the balance is requested in the field medical services sub-activity.

Funds are included in this activity for the California Rural Indian Health Board. Under agreement with the Indian Health Service, the California Rural Indian Health Board makes provision for the delivery of a variety of health services to approximately 24,000 Indians in 32 rural counties in California. The board, in conjunction with their CHR staff, in addition to catalyzing the State and county to be more responsive to the Indian people's localized needs, have developed medical and dental clinics where county, university and volunteer physicians and dentists have provided substantially increased services.

Expected workloads for the hospital program are shown on the following table:

INDIAN HEALTH SERVICE HOSPITALS

Workload Category	1973 Actual	1974 Estimate	1975 Estimate	Increase (+) Decrease (-)
Average Daily Patient Census (Excl. Newborns)	1,499	1,439	1,400	-39
Total GMS Admissions (Excl. Births)	74,961	74,600	75,600	-1,000
Average Length of Stay (days), GMS	7.2	6.9	6.5	-.4
Total Births-Indian Health Service Hospitals	9,844	9,500	9,600	+100
Outpatient Visits to Hospital Facilities	1,330,660	1,400,000	1,470,000	+70,000

(b) Indirect — The 1975 estimate of 40 positions and $45,061,000 provides an increase of $4,428,000 over the 1974 estimate of 40 positions and $40,633,000.

Need for Increase

The requested increase consists of:

Increases	
Mandatory:	
Statutory salary promotions	$ 18,000
Full-year cost of 1974 increased pay cost	5,000
Increased cost of medical care under contract	4,402,000
One additional paid day	3,000
Total Increase	4,428,000

An analysis of the rates negotiated in agreements with the various hospitals, clinics, physicians, and dentists with which the Indian Health Service has current formal contracts, indicates a continuing upward trend. In order to provide the same level of services in 1975 as 1974, it is necessary to plan for this added cost and request the funds to cover this increase. An increase of $4,402,000 is requested for these rising costs.

Plan of Work

The request of $45,061,000 is for the purchase of medical care through contractual arrangements and is an essential element of the Indian Health Service program. Formal agreements are entered into with community hospitals, private physicians and clinic groups, dentists and providers of ancillary health services to assure that quality care is obtained. Through this mechanism health services are practically and effectively provided for the widely scattered and small groups of Indians and Alaska Natives who urgently need such services. In addition, the use of contract services makes possible special diagnostic and therapeutic services which many small intermediate-sized Indian Health Service hospitals cannot provide. Emergency hospitals and medical care services are frequently required at locations not readily accessible to health facilities directly operated by the Indian Health Service.

The table on the following page indicates the distribution of funds under the various items requested for the 1975 program. It also shows how 1973 funds were obligated and the plan for funding for 1974. The actual experience of average daily patient loads are reported for 1973 together with expected levels for 1974 and 1975.

As noted on this table, the average patient load for general inpatients is estimated to increase by 80 over the 1973 level. This increase in ADPL, resulting from additional emphasis being placed on this program by both the Administration and the Congress in 1974, will have an impact on the identified unmet needs. At the beginning of FY 1974, the Indian Health Service had identified $19,600,000 primarily in unmet surgery needs, such as ear surgery, abdominal hernia repairs, gallbladder and bile duct surgery, Utero-vaginal prolapse repair and extraction of cataract of the eye. The impact of the 1974 and 1975 budgets will reduce this unmet need at the end of FY 1975 to $11,000,000 ($15,600,000 based on 1975 prices).

INDIAN HEALTH SERVICE
Indirect - Contractual

Hospitalization:	1973 Actual Average Daily Pt. Load	1973 Actual Rate	1973 Actual Amount	1974 Estimate Average Daily Pt. Load	1974 Estimate Rate	1974 Estimate Amount	1975 Estimate Patient Daily Pt. Load	1975 Estimate Rate	1975 Estimate Amount
General	453	$100.39	$16,598,984	533	$114.44	$22,264,000	533	$130.46	$25,380,000
Tuberculosis	7	53.17	135,857	7	57.42	147,000	7	62.01	158,000
Neuropsychiatric	54	22.21	437,855	54	23.99	473,000	54	25.91	511,000
Total	514		17,172,696	594		22,884,000	594		26,049,000
Patient and escort travel			754,465			854,000			854,000
Professional field supervision			646,236			734,000			757,000
Physicians' services (Inpatient fees, office visits, consultation services).....			8,487,881			9,483,000			9,957,000
Dental services (emergency services, dental laboratory prosthesis)			2,163,149			2,675,000			2,943,000
Other costs (lab and x-ray services, pharmaceuticals, drugs for inpatients and outpatients, prosthesis and burials)			3,701,793			4,003,000			4,501,000
Total			32,926,220			40,633,000			45,061,000

ITEMIZATION OF ESTIMATE
Patient Care

Obligations by Object	Actual 1973	Amount Available 1974	Estimate 1975	Increase (+) Decrease (-)
11 Personnel Compensation	$54,430,950	$58,633,000	$62,374,000	+$3,741,000
12 Personnel benefits	7,913,733	8,509,000	8,877,000	+ 368,000
21 Travel and transportation of persons	3,501,483	3,404,000	3,437,000	+ 33,000
22 Transportation of things	1,167,565	1,211,000	1,192,000	- 19,000
23 Rent, communication, and utilities	4,208,515	4,239,101	7,681,000	+ 3,441,899
24 Printing and reproduction	400,370	228,000	228,000	---
25 Other services	36,292,655	46,398,000	55,180,000	+ 8,782,000
26 Supplies and materials	9,667,502	11,918,000	12,640,000	+ 722,000
31 Equipment	1,591,595	2,609,000	2,272,000	- 337,000
32 Lands and structures ...	756,036	---	---	---
42 Insurance, claims, and indemnities	19,567	---	---	---
Subtotal	119,949,971	137,149,101	153,881,000	+ 16,731,899
Deduct quarters and subsistance charges	-628,019	-628,000	-628,000	---
Net obligations	119,321,952 1/2/3/	136,521,101	153,253,000	+ 16,731,899

1/ Excludes reimbursements as follows: FY 1973 - $1,328,809
FY 1974 - 1,602,000
FY 1975 - 1,602,000

2/ Reflects a 1974 comparative transfer - $13,000; to "Departmental Management, Office of the Secretary".

3/ Reflects a 1975 comparative transfer of $+92,000 from "Office of Assistant Secretary for Health", for Commissioned Officer Personnel Functions; reflects a 1975 Comparative Transfer of $-34,000 to "Departmental Management, Office of the Secretary".

2. Field Health Services

	Actual Obligations 1973		Amount Available 1974		Estimate 1975		Increase (+) Decrease (-)	
	Pos.	Amount	Pos.	Amount	Pos.	Amount	Pos.	Amount
(a) Sanitation	466	$ 7,163,750	469	$ 8,023,000	474	$ 8,315,000	+ 5	+ $ 292,000
(b) Dental	407	6,369,380	430	7,249,000	451	7,718,000	+21	+ 469,000
(c) Public Health Nursing	275	3,691,647	278	4,182,000	282	4,370,000	+ 4	+ 188,000
(d) Health Education	99	1,609,737	99	1,833,000	100	1,900,000	+ 1	+ 67,000
(e) Field Medical Services	1,231	34,526,234	1,344	39,537,000	1,382	47,340,000	+38	+ 7,803,000
Total	2,478	53,360,748	2,620	60,824,000	2,689	69,643,000	+69	+ 8,819,000

Increases

Mandatory:

Statutory Salary Promotions	563,000
Full-Year Cost of 1974 Increased Pay Cost	460,000
Full-Year Cost of 1974 Wageboard Increases	63,000
Increased Cost of Contractual Service	344,000
Increased Cost of Supplies	195,000
Operation of Newly Constructed Facilities:	
Staffing of Tuba City Hospital (47 Positions)	55,000
Staffing of Arapahoe Clinic (4 Positions)	50,000
Full-Year Cost of 250 CHR's Trained in 1974	2,680,000
Increased Contractual Level of 718 CHR's Employed in 1974	436,000
Increased Contractual Level of 250 CHR's in Training in 1975	364,000
Increased Contractual Level of 185 ANCHAT's Employed in 1974	762,000
One Additional Paid Day	117,000
Continuation of Pilot Urban Health Projects, Appropriated in 1973	482,000
Increased Requirements Resulting from 1974 Program Increases for:	
Increased Dental Services for Crow Tribe, Small Tribes of Western Washington, and Aberdeen and Billings Areas - Rapid City Lab (8 Positions)	130,000
Ambulatory Care, Which Includes Eye Care Program ($8,000)	25,000
Operation of Health Centers at Hugo, McAlester, and Eufaula, Oklahoma	390,000
Mental Health (10 Positions)	127,000
Leasing of Alaska Health Clinics	291,000
Funding of Programs Previously Funded by Department of Labor	350,000
Sub-Total Mandatory Increases	7,884,000

Program:

Ambulatory Care	935,000
Total Increases	8,819,000

(a) Sanitation -- The 1975 estimate of 474 positions and $8,315,000 provides an increase of 5 positions and $292,000 over the 1974 estimate of 469 positions and $8,023,000.

Need for Increase

The requested increase consists of:

Increases	
Mandatory:	
Statutory salary promotions	$114,000
Full-year cost of 1974 increased pay cost	86,000
Increased cost of contractual services	8,000
Increased cost of supplies	12,000
Operation of Newly Constructed Facilities:	
Staffing of Tuba City hospital (5 positions)	7,000
One additional paid day	22,000
Increased requirements resulting from 1974 program increase for operation of health centers at Hugo, McAlester, and Eufaula, Oklahoma	43,000
Total Increase	292,000

The physical environment of the American Indian and Alaska Native in most locations throughout the United States is characterized by severe climatic conditions, rough, often treacherous geographical setting, and extreme isolation. Survival under these conditions attests to the ingenuity, adaptability and self-determination of these people.

This harsh environment, coupled with decades of economic deprivation with the resulting lack of basic environmental amenities has contributed greatly to the exceptionally high incidence of disease, and premature deaths, particularly among infants. Since the passage of P.L. 86-121 in 1959, the Indian Health Service has been constructing sanitation facilities for Indian and Alaska Native homes and communities. This fact, together with the growing accomplishments of housing programs of other Federal agencies, has done much to improve the environment of these people. However, many families still lack basic facilities and are subject to the serious health hazards associated with such environmental deficiencies. Other environmental conditions including insect and wild rodent vectors continue to result in sporadic epidemics on Indian reservations.

To combat these and other environmentally related problems, the staff of the environmental health program provides a wide range of environmental health services and engineering and technical support in the implementation of sanitation facilities projects, including those undertaken in coordination with Federal and tribal housing agencies.

Basic Environmental Health Activities

A continuing program of consultations and services is made available to Indian and Alaska Native families and communities to assist them in implementing a comprehensive environmental health program. These consultations and services help the Indian and Alaska Natives in identifying and correcting environmental conditions which are detrimental to their health status and in insuring sustained improvement in the quality of their lives. While still encompassing the traditional environmental concerns of the past, the services presently provided by IHS go far beyond, particularly with regard to consultative and technical services in connection with existing tribal enterprises and planned economic and community development projects. Services of

an occupational health and safety nature are also being expanded. An essential element of these services is the emphasis on community guidance of program activities. This will permit the integration of those activities into the total health, social, and economic structure of Indian and Alaska Native communities.

In addition to the foregoing, the basic environmental health activities incorporate a consultative service to assure that a high level of environmental sanitation is maintained in Federal and other facilities serving Indians, particularly those of the Bureau of Indian Affairs and the Indian Health Service.

In the provision of these basic sanitation services, the Indian and Alaska environmental health aides/technicians are key members of the staff who help bridge the gap of cultural differences to bring modern environmental health practices to Indian communities and groups. These aides/technicians are trained by the Indian Health Service in the basic elements of environmental health and they, in turn, impart this knowledge to their own people. A number of Indian Environmental Health technicians have been selected for long term training which will provide them with necessary knowledge and technical skills to qualify for professional sanitarian positions. A few have already achieved this status.

Sanitation Facilities Construction Activity

The sanitation facilities construction activity complements the basic environmental health activity by providing tangible support in those situations where the need for facilities exceeds the available resources of the Indian people. The Indian Health Service is authorized to provide this assistance under Public Law 86-121, the Indian Sanitation Facilities Act. The activity employs a coordinated Tribal-Federal attack to correct gross deficiencies in individual and community water supplies, liquid and solid waste disposal, and other sanitation facilities. Staffing to implement this work is supported under the Field Health program of the budget.

In the construction activity, Indians participate in project planning and construction and after being equipped and trained by the Indian Health Service, assume responsibility for the operation and maintenance of the completed facilities. In addition, Indian families, Tribes, Housing Authorities, and groups make contributions toward the project in the form of labor and materials to the extent deemed equitable and practicable.

Plan of Work

It is estimated that 104,000 basic and special environmental health services of various types will be provided during 1975. This compares with a level of 102,000 services in 1973 and 1974. In addition, projects will be initiated to serve 13,025 homes with sanitation facilities in FY 1975. Of these, 8,000 will be new or improved homes being constructed under Federal or Tribal housing programs, 1,500 existing homes within or adjacent to housing project sites, and 3,525 existing homes at other locations. This compares with a 1973 level of 13,912 homes and a 1974 level of 11,989 homes.

(b) Dental - The 1975 estimate of 451 positions and $7,718,000 provides an increase of 21 positions and $469,000 over the 1974 estimate of 430 positions and $7,249,000.

Need for Increase

The requested increase consists of:

Increases	
Mandatory:	
Statutory salary promotions	$ 69,000
Full-year cost of 1974 increased pay cost	81,000
Increased cost of contractual services	4,000
Increased cost of supplies	27,000
Operation of Newly Constructed Facilities:	
Staffing of Tuba City Hospital (10 positions)	12,000
Staffing of Arapahoe Clinic (3 positions)	40,000
One additional Paid Day	20,000
Increased Requirements Resulting From 1974 Program Increases For:	
Increased Dental Services in Aberdeen and Billings Area (Rapid City Lab.)	100,000
Operation of health centers at Hugo, McAlester, and Eufaula, Oklahoma	86,000
Dental Services for Crow Tribe, Montana and Small Tribes of Western Washington (8 positions)	30,000
Total Increase	469,000

The dental program of the Indian Health Service emphasizes preventive, educational and corrective services to school age children. In Fiscal Year 1973, 41.1 percent of the total estimated need for dental services was provided.

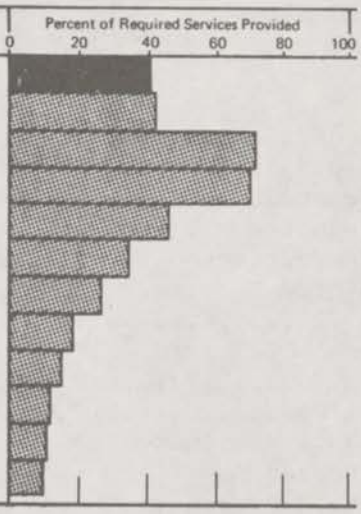
The following table and graph illustrate the proportion of needed dental services that the Indian Health Service was able to provide in Fiscal Year 1973. The chart clearly points up the program emphasis placed upon dental care to the young to achieve the greatest preventive result. Most adults receive only emergency services.

PERCENT DENTAL SERVICES PROVIDED OF THOSE REQUIRED
INDIAN AND ALASKA NATIVE POPULATION

Fiscal Year 1973

Direct and Indirect

Age Group of Patients	Services Required	Services Provided	Percent Provided
ALL AGES	2,100,042	863,057	41.1
Under 5	103,780	44,404	42.8
5 – 9	364,905	258,447	70.9
10 – 14	305,130	212,943	69.8
15 – 19	267,906	120,629	45.1
20 – 24	162,485	56,729	34.9
25 – 34	276,759	73,388	26.5
35 – 44	243,553	44,166	18.1
45 – 54	176,481	27,967	15.8
55 – 64	119,288	15,004	12.6
65 – 74	58,675	7,149	12.2
75+	21,080	2,233	10.6



The number of people served increased 1.8 percent and the services provided increased 2.1 percent (all dental resources considered).

In 1974, after four years of development, a quality of care evaluation system was implemented for all dental clinicians in the IHS. Numerous opportunities to improve the quality of clinical work, record keeping, patient management, and community services were identified.

Plan of Work - 1975

Basic preventive and corrective services will continue with emphasis on maintaining and expanding services among the young. A gradual shift from a school controlled to a family oriented program will occur as the program becomes capable of providing more than emergency care to adults. College students and parents will receive primary attention among adults.

The water fluoridation surveillance system will continue with dental and environmental health staff working together to monitor Indian community water systems which have fluoridation equipment installed. Systems not functioning properly will be identified and corrective action will be taken, with Indian community leaders, to ensure that water fluoridation systems are operated properly in Indian communities.

Trends in Clinical Services

Persons Treated	1972	1973	1974 est.	1975 est.
Total dental program	183,694	186,913	202,000	208,000
Indirect	30,365	30,865	38,000	38,000
Direct	153,329	156,048	164,000	170,000
Population	469,632	479,349	489,000	498,000
Percent Served	39.1%	39.0%	41.3%	41.8%
Services Provided				
Total dental program	844,724	863,057	926,000	955,000
Indirect	126,548	134,148	166,000	166,000
Direct	718,176	728,909	760,000	789,000
Services required per person	4.5	4.38	4.30	4.20
Services required	2,098,861	2,100,042	2,101,000	2,091,000
Percent Provided	40.2%	41.1%	44.1%	45.7%

(c) Public Health Nursing - The 1975 estimate of 282 positions and $4,370,000 provides an increase of 4 positions and $188,000 over the 1974 estimate of 278 positions and $4,182,000.

Need for Increase

The requested increase consists of:

Increases

Mandatory:

Statutory salary promotions	$ 57,000
Full-year cost of 1974 increased pay cost	42,000
Increased cost of contractual services	30,000
Increased cost of supplies	5,000
Operation of Newly Constructed Facilities: Staffing of Tuba City Hospital (4 positions)	4,000
One additional paid day	13,000
Increased requirements resulting from 1974 Program Increase for operation of health centers at Hugo, McAlester and Eufaula, Oklahoma	37,000
Total Increase	188,000

Public health nursing is the core of any public health program. The activities of the public health nurse include case finding, health teaching, counseling, and follow-up services to provide continuity of care in the home, school hospital, and clinic. These services are essential to an effective community generalized public health program. The public health nurse's unique contribution is through her first-hand knowledge of the families and their home situations, and through the impact of the nurse-family relationship as a therapeutic and teaching force. This places emphasis on the importance of sustained contact and on the inter personal facets of nursing practice. The public health nurse's effectiveness is largely dependent upon establishing and maintaining a relationship of mutual trust and respect, with the families served.

With the increasing number of the various types of indigenous auxiliary workers now being utilized, better distribution of professional and non-professional functions and greater teamwork are possible. Therefore, more of the professional public health nurse's time and effort will involve coordination of the "team effort", and supervision and guidance of the para-professional workers.

In addition, some public health nurses with additional special educational preparation are evolving into the new role of Family Nurse Practitioner, taking over some primary care functions formerly carried out only by the physician, thus further extending the services of the physician by freeing him for those services that truly require his skill and knowledge.

Plan of Work

In 1975, program efforts will be concentrated on coordination of team effort both within the public health nursing group and with other health personnel, particularly the Community Health Representatives and other indigenous auxiliary workers. Efforts will be further intensified in the following:

1. Initiating the expansion and strengthening of the total public health nursing program in the Tuba City Service Unit.

2. Follow-up of "high risk" families.

3. Strengthening of health teaching in homes, hospitals, clinics, schools, and the community, with the goal of preventing disease or retarding its progress; reducing the ill effects of unavoidable disease; teaching a member of the family to give nursing care to the non-hospitalized sick and handicapped; development of and

practice of habits conducive to health; and increasing the capability of families, groups, and communities to cope with health problems that arise and with problems of daily living.

4. Provision of counseling and guidance in health and family living to teenagers and young adults.

5. Prevention of complications of pregnancy and improvement of the general health status of expectant mothers and their infants by getting them under care early in pregnancy, and through family planning education.

6. Further reduction of infant morbidity and mortality through early visits to new infants, and by giving highest priority to infants in high risk families.

7. Prevention of infectious disease in infants and children by achieving and maintaining a high level of immunization.

In FY 1975, it is estimated that public health nursing services will be provided to approximately 29,200 families as compared with 28,635 in 1973 and 29,000 in 1974. This constitutes about 28% of Indian families.

(d) Health Education - The 1975 estimate of 100 positions and $1,900,000 provides an increase of 1 position and $67,000 over the 1974 estimate of 99 positions and $1,833,000.

Need for Increase

The requested increase consists of:

Increases	
Mandatory:	
Statutory salary promotions	$34,000
Full-year cost of 1974 increased pay cost	21,000
Increased cost of contractual services	1,000
Increased cost of supplies	4,000
Operation of Newly Constructed Facilities:	
Staffing of Tuba City Hospital (1 positions)	1,000
One additional paid day	6,000
Total Increase	67,000

The health education program of the Indian Health Service is designed to assist the Indians and Alaska Natives to assume greater individual, family, and community responsibility in health matters through involvement and participation in community and health related activities.

The aim of the program is to provide all patients in medical care facilities with specific and organized health education activities to prevent recurrence and spread of diseases and to provide Indian populations with health education experiences designed to reduce the risk from disease and injury.

Plan of Work

In 1975 emphasis will continue to be placed on efforts to achieve greater involvement of the Indian and Alaska Natives in their own health affairs in order to enhance:

1. the development of Indian leadership in the assumption of responsibility for health matters, and to involve more completely other agencies that have potentials for contributing to improving the health of Indian population.

2. community acceptance and use of health care services and preventive resources.

3. the development of decision-making skills among the Indian and Alaska Natives.

4. opportunities for use of educational potentials in health program planning and operation.

5. coordination of activities to incorporate health instruction in the curriculum of schools; encourage the health instruction concept among teacher; tie in community education programs with school health projects to increase knowledge of wholesome living conditions.

(e) Field Medical Services - The 1975 estimate of 1,382 positions and $47,340,000 provides an increase of 38 positions and $7,803,000 over the 1974 estimate of 1,344 positions and $39,537,000.

Need for Increase

The requested increase consists of:

Increases	
Mandatory:	
Statutory salary promotions	$289,000
Full-year cost of 1974 increased pay cost	230,000
Full-year cost of 1974 wage board increases	63,000
Increased cost of contractual services	301,000
Increased cost of supplies	147,000
Operation of Newly Constructed Facilities:	
Staffing of Tuba City Hospital (27 positions)	31,000
Staffing of Arapahoe Clinic (1 position)	10,000
Full-year cost of 250 CHR's trained in 1974	2,680,000
Increased contractual level of 718 CHR's employed in 1974	436,000
Increased contractual level of 250 CHR's in training in 1975	364,000
Increased contractual level of 185 ANCHAT's employed in 1974	762,000
One additional paid day	56,000
Continuation of Pilot Urban Health Projects, Appropriated in 1973	482,000
Increased Requirements Resulting From 1974 Program Increases for:	
Ambulatory Care, which include Eye Care Program	25,000
Operation of health centers at Hugo, McAlester, and Eufaula, Oklahoma	224,000
Mental Health (10 positions)	127,000
Leasing of Alaskan health clinics	291,000
Funding of programs previously funded by Department of Labor	350,000
Sub-Total - Mandatory Increases	6,868,000
Program	
Ambulatory Care for Field Clinics	935,000
Total - Increase	7,803,000

AMBULATORY CARE - $935,000

An increase of $935,000 is requested for ambulatory care in the field medical services activity. This is to support outpatient and preventive health services provided at health centers and health stations. The health stations are operated part time by staff from the fixed facilities to provide services to the more isolated Indian and Alaska Native communities that do not have easy access to major Indian Health facilities. Patients receive primary health care at the health centers and stations. Those requiring more definitive care are referred to hospitals. Follow-up services are also provided after hospitalization. The preventive health services include a vast range of activities such as prenatal and post-natal care, family planning consultation and services, well-child clinics, school health, control of communicable diseases including immunization and screening and follow-up of cases and contacts, e.g., tuberculosis, venereal diseases and trachoma, early detection and prevention of chronic diseases such as diabetes, deficiency diseases and mental health. A mental health program, including alcohol control and prevention provides basic services to the Indian people spread over vast areas with no other access to mental health resources. This is an integral part of improving the general health of Indian people to fulfill their potential in society. A maternal and child health program, including family planning and care of high risk mothers and babies, is a high priority program, and included in the curative and preventive services.

Plan of Work

The Field Medical Services program functions through a system of 83 centers (including 26 school health centers), and several hundred smaller health stations and satellite clinics. It provides a full range of ambulatory medical care, preventive care, and public health services to the Indian and Alaska Native people. In addition, the field medical program provides specialized clinics for the communities in such activities as immunization programs, well-baby clinics, and pre- and post-natal clinics, as well as programs for otitis media, trachoma, venereal diseases, diabetes, family planning, and mental health services, etc. The field medical program provides medical support to the field health program, which extends health services into the community and homes, providing counseling and other health information and services to residents of the locale being served. It also supports the hospital program by providing post hospitalization after care to recently discharged patients. The volume of outpatient visits for preventive and therapeutic medical services at the health centers and health stations is estimated at 1,067,000 for 1975. This compares with an estimated 1,033,000 in 1974 and 998,500 in 1973. These increases in outpatient visits will provide for additional therapeutic and preventive health services for such health problems as mental health, venereal diseases, tuberculosis, maternal and child health, family planning, and crippling conditions among children such as otitis media, cleft palate, orthopedic conditions, and congenital heart disease.

The growing participation of Indian and Alaska Native people in all phases of planning, operation and evaluation of the Indian Health Service health delivery system will be continued in 1975. In carrying out the field medical services program, the following areas of health services delivery will be emphasized:

1. The major thrust will continue to be the provision of high quality health care, with a strong emphasis on provision of ambulatory care services.

2. A very close rapport has developed between the Indian and Alaska Native people and the Indian Health Service field medical team. This rapport has been reinforced by the Community Health Representatives and Alaska Community Health Aides. These Indian people are, in many instances, a major link between health needs and health resources. In Alaska, they are the only people with health training in residence.

   The function of Community Health Representatives is to act as liaison between community residents, existing health resources, and community health activities; to promote local participation in health programs; locate new health resources; devise innovative and more effective ways to utilize resources that are available; and to carry out other tribally defined, high priority health functions. Trained by the Indian Health Service, they work in their communities for their respective tribes who are under contractual arrangement with the Indian Health Service. The 1975 budget provides for the employment of 968 representatives serving Indian people in the contiguous United States, and an additional 250 to be trained during the year. There will also be 185 Alaska Native Community Health Aides delivering services to residents to 156 isolated villages in Alaska. These health aides are trained to perform a wide range of medical services under professional supervision received via shortwave radio or telephone. For the last two years, the physician-health aide communication has been via satellite for fourteen villages in the Tanana Service Unit; this satellite capability will be upgraded in June 1974 on an experimental basis to include video communications between physicians and selected villages.

3. In 1975 there will be continued emphasis on tribally operated programs in such areas as maternal and child health, alcoholism, nutrition, family planning, drug abuse, and suicide prevention.

4. Efforts will be intensified in purchasing other services from the tribes wherever possible. This would include such services as maintenance of water and sewer systems, leasing of building space, transportation systems, utilities, communication systems, etc.

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5. Three additional Pilot Urban Health Projects are now established modeled after the Minneapolis Plan which has been in operation since FY 1972. These projects are designed to identify and seek solutions for health problems in metropolitan areas. Additional Pilot Urban Indian Health Projects are being initiated in FY 1974.

6. The program of leasing health clinics for Alaska Native groups will be continued in 1975.

As noted in the narrative justification for the direct care program, $350,000 is requested to fund programs previously funded by the Department of Labor.

ITEMIZATION OF ESTIMATE
Field Health Services

		Actual 1973	Amount Available 1974	Estimate 1975	Increase (+) Decrease (-)
11	Personnel compensation	$26,284,120	$28,877,000	$31,082,000	+ $2,205,000
12	Personnel benefits	4,467,523	4,587,000	4,805,000	+ 218,000
21	Travel and transportation of persons.....	2,888,618	3,159,000	3,160,000	+ 1,000
22	Transportation of things	1,066,554	1,106,000	1,070,000	- 36,000
23	Rent, communications, and utilities	1,650,344	1,814,000	2,233,000	+ 419,000
24	Printing and reproduction	112,914	135,000	135,000	—
25	Other services	12,751,562	16,382,000	22,587,000	+ 6,205,000
26	Supplies and materials ..	2,763,976	3,369,000	3,598,000	+ 229,000
31	Equipment	1,485,683	1,561,000	1,139,000	- 422,000
32	Lands and structures	44,225	—	—	—
42	Insurance, claims, and indemnities	10,991	—	—	—
	Subtotal	53,526,510	60,990,000	69,809,000	+ 8,819,000
	Deduct quarters and subsistence charges	-165,762	-166,000	-166,000	—
	Net obligations	1/2/ 53,360,748	1/2/ 60,824,000	1/ 69,643,000	+ 8,819,000

1/ Excludes reimbursements as follows: 1973 - $112,720
1974 - $113,000
1975 - $113,000

2/ Reflects a 1975 comparative transfer - $+111,000 from "Office of Assistant Secretary for Health", for Commissioned Officer Personnel Functions.

3. Program Management

	Actual 1973	Amount Available 1974	Estimate 1975
Program Management	$2,726,127	$2,992,000	$3,147,000

The 1975 estimate of 128 positions and $3,147,000 provides an increase of $155,000 over 1974.

Need for Increase

The requested increase consists of:

Mandatory Increases:	
Statutory salary promotions	$ 49,000
Full-year cost of 1974 increased pay cost	36,000
Increased cost of contractual services	59,000
Increased cost of supplies	1,000
One additional paid day	10,000
Total increase	155,000

The Indian Health Service headquarters staff, which is required to effectively direct a widely dispersed and extremely complex health service program, is funded under this title. This staff includes (1) positions specializing in the field of curative and preventive health, (2) staff engaged in such specialized fields as nutrition, medical social work, statistics, financial management, program planning, and general services.

The 1975 estimate of $3,147,000 for the Administration activity provides for a continuation of operation in 1975 comparable to that of 1974.

ITEMIZATION OF ESTIMATE
Program Management

Obligations by Object	Actual 1973	Amount Available 1974	Estimate 1975	Increase (+) Decrease (-)
11 Personnel compensation	$1,950,770	$ 2,360,000	$ 2,446,000	$ +86,000
12 Personnel benefits	239,952	294,000	303,000	+ 9,000
21 Travel and transportation of persons	133,325	140,000	140,000	—
22 Transportation of things	10,312	10,000	10,000	—
23 Rent, communications, and utilities	87,343	87,000	87,000	—
24 Printing and reproduction	2,029	1,000	1,000	—
25 Other services	269,761	77,000	136,000	+ 59,000
26 Supplies and materials	17,733	15,000	16,000	+ 1,000
31 Equipment	14,902	8,000	8,000	—
Subtotal	2,726,127	2,992,000	3,147,000	+155,000
Deduct quarters and subsistence charges	—	—	—	—
Net obligations	2,726,127 1/	2,992,000 1/	3,147,000	+155,000

1/ Reflects a 1975 comparative transfer - $2,000 from "Office of Assistant Secretary for Health", for Commissioned Officer Personnel Functions.

ITEMIZATION OF ESTIMATE
Department of Health, Education and Welfare
Health Services Administration
Activity Title: Indian Health Services

	Actual 1973	Amount Available 1974	Estimate 1975	Increase (+) Decrease (-)
Obligations ...	$175,408,827	$200,337,101	$226,043,000	+25,705,899
Unobligated balance lapsing	132,246	...	...	...
Budget Authority	175,541,073	200,337,101	226,043,000	25,705,899
Transferred to Operating expenses, public building service, GSA....	+98,927	+117,899	...	-117,899
Comparative Transfer to "Departmental Management, Office of the Secretary".....	+47,000	+34,000	...	-34,000
Comparative Transfer from "Office of Assistant Secretary for Health", for Commissioned Officer's Personnel Functions..	-205,000	-205,000	...	+205,000
1974 Proposed Transfer for Increased Pay Cost	...	-9,410,000	...	+9,410,000
1974 Proposed Supplemental for CMC, ANCHAT and Ambulatory Care..	...	-6,591,000	...	+6,591,000
Appropriation ..	175,482,000	184,283,000	226,043,000	+41,760,000
11 Personnel compensation	82,665,840	89,870,000	95,902,000	+6,032,000
12 Personnel benefits	12,621,208	13,390,000	13,985,000	+ 595,000
21 Travel and transportation of persons ..	6,523,426	6,703,000	6,737,000	+ 34,000
22 Transportation of things ...	2,244,431	2,327,000	2,272,000	- 55,000
23 Rent, Communications, and utilities ...	5,946,202	6,140,101	10,001,000	+3,860,899
24 Printing and reproduction ..	515,313	364,000	364,000	...
25 Other services ...	49,313,978	62,857,000	77,903,000	+15,046,000
26 Supplies and materials ..	12,449,211	15,302,000	16,254,000	+ 952,000
31 Equipment ...	3,092,180	4,178,000	3,419,000	- 759,000
32 Lands and structures ..	800,261	...	...	...

	Actual 1973	Amount Available 1974	Estimate 1975	Increase (+) Decrease (-)
42 Insurance, claims, and indemnities..	30,558	...	...	...
Sub-Total	176,202,608	201,131,101	226,837,000	+25,705,899
Deduct quarters and subsistence charges	-793,781	-794,000	-794,000	...
Total Obligations	175,408,827 2/3/ 1/	200,337,101 3/ 1/	226,043,000 1/	+25,705,899

1/ Excludes reimbursements as follows: 1973 - $1,441,529; 1974 - $1,715,000; 1975 - $1,715,000.

2/ Reflects a 1974 comparative transfer - $13,000; to "Departmental Management, Office of the Secretary".

3/ Reflects a 1975 comparative transfer $205,000 from "Office of Assistant Secretary for Health", for Commissioned Officer Personnel Functions; reflects a 1975 Comparative Transfer - $34,000 to "Departmental Management, Office of the Secretary".

Indian Health Services

Summary of Positions and Average Employment

Positions

Activity	1973	1974	1975
Patient Care:			
Direct	4,835	4,963	5,206
Indirect	40	40	40
Total Patient Care	4,875	5,003	5,246
Field Health Services:			
Sanitation	466	469	474
Dental	407	430	451
Public Health Nursing	275	278	282
Health Education	99	99	100
Field Medical Services	1,231	1,344	1,382
Total Field Health	2,478	2,620	2,689
Program Management	128	128	128
Total	7,481 1/	7,751 1/	8,063 1/

Average Employment

Patient Care:			
Direct	4,905	4,901	5,015
Indirect	37	36	36
Total Patient Care	4,942	4,937	5,051
Field Health Services:			
Sanitation	406	410	411
Dental	403	407	429
Public Health Nursing	253	246	247
Health Education	89	95	95
Field Medical Services	1,218	1,190	1,251
Total Field Health	2,369	2,348	2,433
Program Management	117	122	122
Total	7,428 2/	7,407 2/	7,608 2/

1/ Excludes reimbursable positions as follows: 1973-54; 1974-54; 1975-54.

2/ Excludes reimbursable average employment as follows: 1973-54; 1974-54; 1975-54.

Indian Health Facilities

Summary of Increases and Decreases

Appropriation, 1974		$49,927,000
Unobligated balance from prior years		5,480,600
Total available for obligation		55,407,600
Decreases:		
Hospitals	$14,530,660	
Outpatient care facilities	481,691	
Community facilities	531,079	
Sanitation facilities	37,164,866	
Personnel quarters	42,304	52,750,600
Carried into 1975		2,657,000
Increases (1975 appropriation request):		
Hospitals		8,560,000
Outpatient care facilities		375,000
Sanitation facilities		40,521,000
Personnel quarters		5,500,000
Total available for obligation		57,613,000

ANALYSIS BY ACTIVITY

Amounts Available for Obligation

	Amount Available 1974	Fiscal Year 1975 Unobligated Balance From Prior Years	Fiscal Year 1975 1975 Budget Request	Fiscal Year 1975 Estimated Total Available	Total Available 1975 compared to Total Available 1974
Hospitals ..	$15,378,660	$ 848,000	$8,560,000	$9,408,000	$-5,970,660
Outpatient care facilities ..	481,691	...	375,000	375,000	-106,691
Community facilities .	531,079	...	...	...	-531,079
Sanitation facilities .	38,973,866	1,809,000	40,521,000	42,330,000	+3,356,134
Personnel quarters ...	42,304	...	5,500,000	5,500,000	+5,457,696
Total	55,407,600	2,657,000	54,956,000	57,613,000	+2,205,400

Obligations by Activity

	1973 Actual	1974 Estimate	1975 Estimate	Increase(+) Decrease(-)
Hospitals	$8,609,828	$14,530,660	$8,980,000	$-5,550,660
Outpatient care facilities	113,170	481,691	355,000	-126,691
Community facilities	120,921	531,079	...	-531,079
Sanitation facilities	34,249,671	37,164,866	40,305,000	+3,140,134
Personnel quarters . .	8,989	42,304	5,225,000	+5,182,696
Total	43,102,579	52,750,600	54,865,000	+2,114,400

ITEMIZATION OF ESTIMATE

	Actual 1973	Estimate 1974	Estimate 1975	Increase(+) Decrease(-)
Program and Financing				
Total obligations ..	$43,102,579	$52,750,600	$54,865,000	+2,114,400
Unobligated balance brought forward ...	-4,034,179	-5,480,600	-2,657,000	+2,823,600
Unobligated balance carried forward ...	+5,480,600	+2,657,000	+2,748,000	+ 91,000
Appropriation	44,549,000	49,927,000	54,956,000	+5,029,000
Obligation by Objects				
11 Personnel compensation	3,923,630	5,372,000	5,382,000	+ 10,000
12 Personnel benefits	188,601	323,000	325,000	+ 2,000
21 Travel and transportation of persons	196,846	230,000	232,000	+ 2,000
22 Transportation of things	1,038,571	1,128,000	1,178,000	+ 50,000
23 Rent, communications, and utilities	232,707	248,000	263,000	+ 15,000
24 Printing and reproduction	24,978	70,000	76,000	+ 6,000
25 Other services	4,795,937	6,340,000	5,733,000	- 607,000
26 Supplies and materials	5,117,029	5,626,000	5,756,000	+ 130,000
31 Equipment	894,303	1,028,291	1,126,000	+ 97,709
32 Lands and structures	26,566,598	31,854,230	34,794,000	+2,939,770
41 Grants, subsidies and contributions	120,921	531,079	...	- 531,079
42 Insurance claims and indemnities ...	2,458	...	...	...
Total obligations	43,102,579	52,750,600	54,865,000	+2,114,400

Highlight Statement

The Indian health construction program is concerned with the provision of medical and health facilities needed to provide services directly to Indians and Alaska Natives and assistance to Indian groups and individuals in the construction of Indian sanitation facilities, under the authority granted by Public Law 86-121.

Approximately 498,000 Indians and Alaska Natives look to the Indian Health Program for medical and hospital care and the full range of public health services. They live over a widely dispersed geographical area comprised of more than 250 reservations, colonies and communities in 25 states, and in hundreds of villages in Alaska.

Sufficient and adequate, up-to-date facilities are necessary to provide proper medical care and public health services. Despite continuous improvement in this direction, many of the Indian Health Service facilities (hospitals, health centers and stations) are still grossly inadequate, lack the necessary space, are not functionally arranged nor properly equipped, involve hazardous conditions, or require major repairs, and thereby represent a major deterrent to efficient use of personnel and the practice of modern medicine. Further, there is a need to provide hospitals, health centers and health stations near where the Indians live.

The continuing interest and financial support by the President and the Congress have enabled the Indian Health Service to initiate an orderly program of construction and modernization. This program is designed to correct the inadequate, obsolete, and in many instances structurally deficient facilities that exist. Currently there is under construction a replacement hospital at Tuba City, Arizona. Completion of this facility is contemplated for early in calendar year 1975. Construction funds are also available for replacement facilities at Zuni, New Mexico, Philadelphia, Mississippi and Owyhee, Nevada. It is envisioned that construction contracts on all three will be awarded before the end of fiscal year 1974. Funds are also available to plan or master plan new, replacement, or modernized hospitals at ten other locations and plan replacement of a health center at Chemawa, Oregon.

The 1975 request contains construction funds for a new (replacement) hospital at Claremore, Oklahoma, a new school health center at Riverside, California, and a dental addition to the Tohatchi, New Mexico clinic.

Because of the remoteness of most of the Indian health facilities, it is necessary to provide quarters for many of the staff in the program. In 1975, 207 units of quarters are requested to house the additional staff that will be required to operate the newly constructed medical facility currently under construction at Tuba City, Arizona.

The scarcity of water for even elemental household purposes is still a problem among Indian and Alaska Native groups. Thousands of Indians on many reservations haul water in a primitive manner for distances of a mile or more, often from a water source which is unsafe. Some are forced to draw on contaminated streams, irrigation ditches, stock ponds, or unprotected wells and springs for their domestic water.

The lack of adequate facilities for the disposal of human and other household wastes is another major deterrent to good health for Indians and Alaska Natives. The lack of these facilities contributes to the spread of micro-organisms responsible for diarrheas and dysenteries, insect and rodent infestations, in both Indian homes and communities, and to the contamination of foods and water supplies. However, a combined Federal-Tribal effort is being waged to overcome as much of this deficiency as possible. Through 1974, approximately 50,500 existing Indian and Alaska Native homes will have been provided new or improved sanitation facilities. In addition, facilities will have been constructed to serve approximately 40,000 new and improved homes built under Federal or Tribal housing programs.

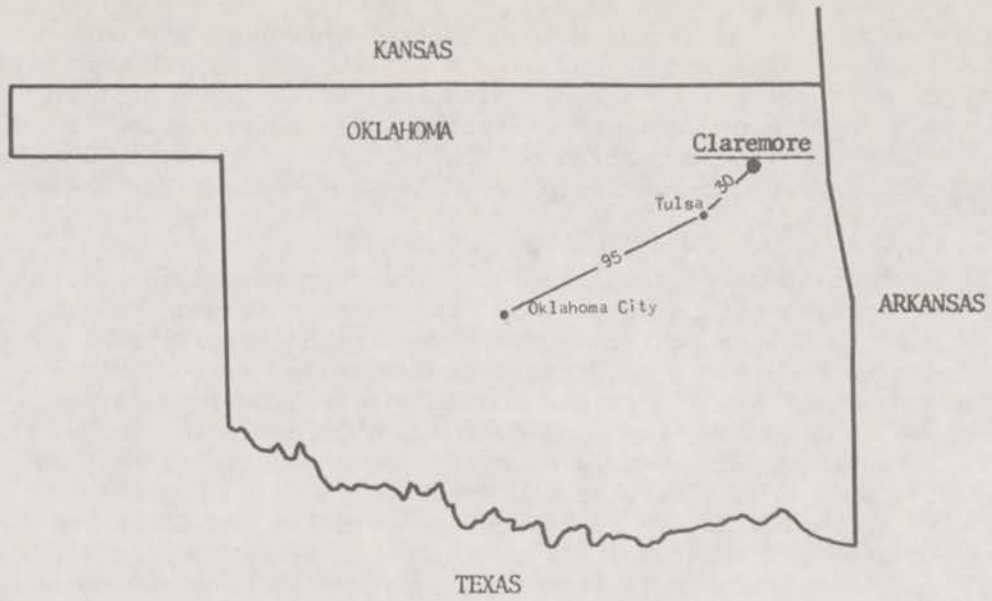
The 1975 request provides funds for the provision of sanitation facilities for: (1) 8,000 housing units being constructed or improved by the Department of Housing and Urban Development, the Bureau of Indian Affairs, and Indian Tribes; (2) approximately 1,500 existing homes located within or adjacent to housing program sites; and (3) for 3,525 existing homes in other locations. In addition, funds are included to provide sanitation facilities for Indian ceremonial areas and meeting places; to conduct necessary engineering investigations; and to correct emergency problems resulting from unforeseen conditions and situations that are beyond the capabilities and resources of the Indians.

HEALTH FACILITIES - 1975 request $14,435,000

1. Claremore Health Facility

Claremore, Oklahoma $8,560,000

Construction funds for a replacement facility



Claremore Project Cost Estimate

A/E design cost previously appropriated ...	$ 200,000
Construction funds requested in 1975	8,560,000
Total construction cost estimate	$8,760,000

Funds for a new comprehensive community health facility for the Claremore, Oklahoma, Service Unit are requested in 1975. The new facility at Claremore will replace an existing facility constructed in two phases in 1928 and 1935. The old 33,500 square-foot facility is no longer capable of responding to the health needs of the Claremore community.

Geographic Background

The Claremore Service Unit is located in the northeastern part of Oklahoma, bounded on the north by the Kansas State line and the States of Missouri and Arkansas on the east. The eastern part of the Service unit is in the foothills of the Ozarks and is quite hilly. The remainder is rather flat land devoted to farming. It is comprised of twelve counties having an estimated Indian population of approximately 35,000. Practically all of the counties which comprise the Claremore Service Unit include communities located in the rural areas. It serves a population primarily of the Cherokee and Creek tribes, but also includes some of the smaller tribes, such as Quapaw, Miami, Seneca, Wyandotte, and Euchee.

Economic Status

The Claremore Service Unit family size is somewhat larger than the national average of 3.57 persons; however, the median family income of Oklahoma Indians is only approximately 57% of that of the U. S. general population average of $9,590. Unemployment is high and the general level of education is low. Availability to communi-

cations is relatively poor with only 10% of the houses having a telephone.

Community Facilities and Referral Facilities

There are no major community health facilities located conveniently near the Claremore Indian Hospital. The closest major referral facilities are located in Tulsa about 30 miles away. They are St. Francis Hospital, Hilcrest Memorial Hospital, and St. John's Hospital.

1975 Request

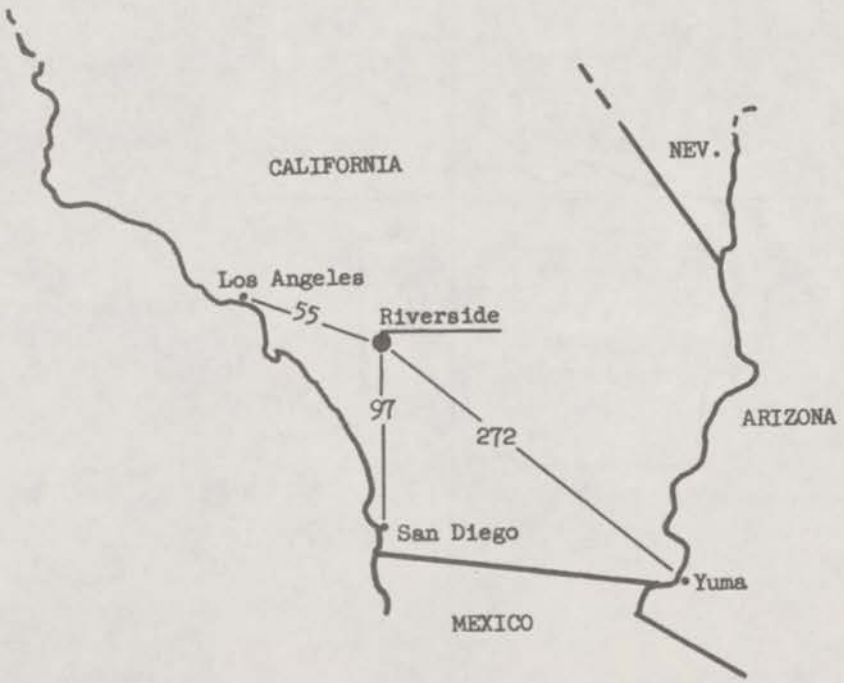
This proposed new facility, containing a gross area of 92,000 square feet, will be situated in the northeastern part of Oklahoma. It will be comprised of a 60-bed inpatient area, a 20-bed multipurpose unit, an outpatient department, areas for supportive services and space for field health activities. It is anticipated that the daily patient census will average about 54 and that there eventually will be 48,000 annual outpatient visits to the facility. Construction is scheduled to be completed during the middle part of fiscal year 1976.

HEALTH FACILITIES -

2. Riverside School Health Center

Riverside, California $275,000

Construction funds for a replacement facility



Existing Facility

A new school health center is requested for Riverside, California to replace the original school health facility that was built

in 1904 and was razed to provide room for the new Bureau of Indian Affairs boarding school complex being constructed there. The current medical program is being conducted from a house trailer on the Riverside school campus; however, this facility is not properly designed to meet the health needs of a growing student population.

Proposed Facility

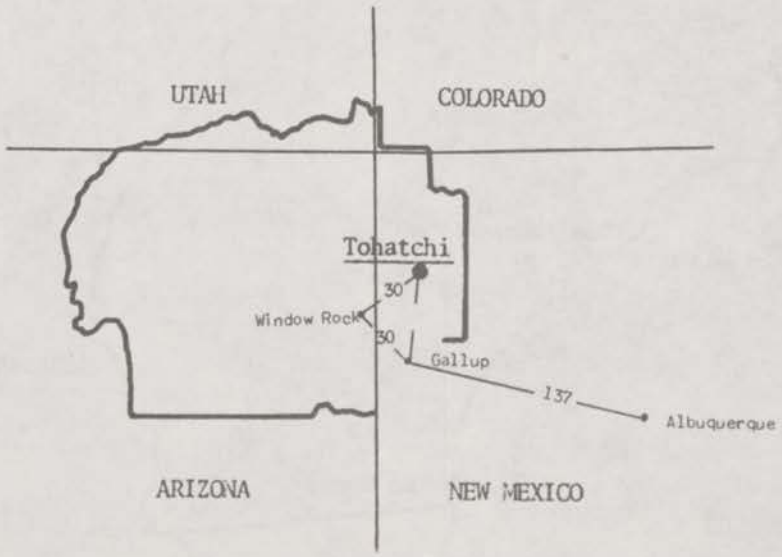
A new school health center will provide services to an estimated student population of 1,000 pupils by fiscal year 1977. It will include space for medical, public health, dental clinics; examining and treatment rooms to properly examine, diagnose and treat minor illnesses and injuries, and give routine and specialized medical and dental care. It will enable screening for referral of serious or complicated conditions; specialized clinics; providing immunizations, physical examinations, health counseling and tests on all students; and giving in-service training to school and dormitory personnel. Serious illnesses and complicated cases will be referred to community hospitals in Riverside.

It is estimated that when in full operation the annual workloads will be 4,500 dental services performed and 10,000 clinical visits. Construction is scheduled to be completed during the latter part of FY 1976.

3 Tohatchi Health Center

Tohatchi, New Mexico $100,000

Expand Health Center



It is requested that $100,000 be appropriated in 1975 to expand the health center at Tohatchi, New Mexico. This expansion will alleviate overcrowded conditions and will provide space for a total

of five dental operatories, a waiting area, a dental laboratory and a dark room.

At present, two existing dental operatories average approximately 1,900 dental examinations and 9,900 dental services per year.

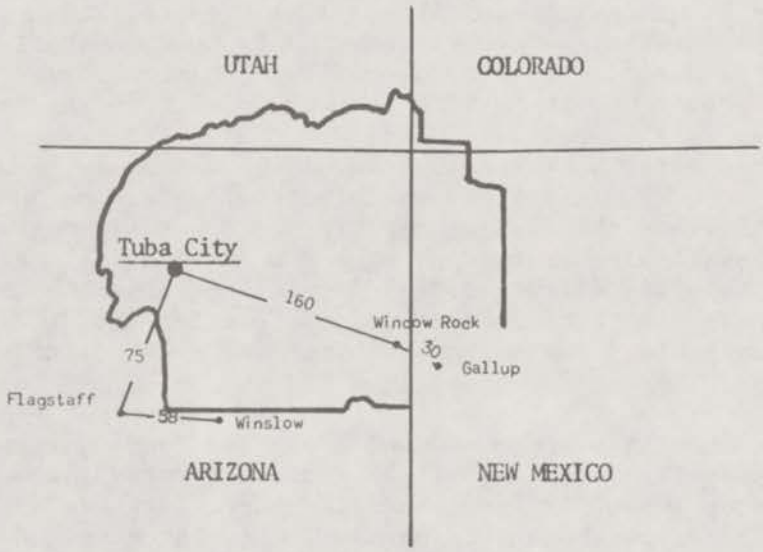
The proposed addition plus some alterations, will provide space that will permit complete dental care to the approximately 5,000 children in schools in the vicinity of the health center. Care will also be provided where possible to pre-school children, prenatals, and specified young adults living in the general vicinity.

It is estimated that the eventual patient load will increase to 2,800 examinations and 15,800 services per year when the dental addition is completed during the first part of fiscal year 1976.

4. Tuba City Quarters

Tuba City, Arizona $5,500,000

Construction of 207 Units of Personnel Quarters



207 units of personnel quarters are requested in 1975 for the purpose of providing housing for additional staff that will be required to operate the new Tuba City Hospital currently under construction.

When the replacement hospital is in full operation there will be a total authorized staff of 380. There are currently 64 adequate units of housing available. An analysis of the personnel quarters requirements for Tuba City is as follows:

STAFF:

Total Staff (after construction)	380
Less Local Hire	-109
Total Quarters Needed	271

QUARTERS:

Existing Quarters Units	85
Less Substandard	-21
Adequate Housing Units Available	-64
Number of Quarters Required	207

The distance from Tuba City to an established community (Flagstaff, Arizona) is approximately 75 miles. Private housing for rent or purchase is not available on or near the hospital site. Availbility of private financing for housing is practically non-existent. Public transportation is not available. It is often necessary for the hospital staff to be available on a 24-hour basis and be immediately accessible to the hospital. To recruit and retain the necessary staff to conduct the comprehensive health program envisioned for Tuba City there is a requirement for 207 additional units.

SANITATION FACILITIES - 1975 Request $40,521,000

Provision of essential sanitation facilities for Indian communities and homes is vital in the prevention of environmentally related diseases and is basic to the improvement of health. During the past 14 years the Indian Health Service has worked with Indians and Alaska Natives in a cooperative effort to correct the gross insanitary conditions existing in their communities and homes. Substantial progress has been made which has contributed to a reduction in the infant mortality and the gastroenteritis death rates; however, the lack of safe available water supplies and waste disposal facilities continues to be a significant deficiency in the Indian environment. This condition is in large measure responsible for the high incidence of preventable disease that still prevails among Indians and Alaska Natives. For example:

1. Gastroenteritis ranked second among the leading reportable diseases for Indians in 1972; incidance rates for amebiosis dysentery was 2.2 times, bacillary dysentery was 49.6 times, and infectious hepatitis was 10.7 times greater than the rate in the general population.

2. The Indian infant death rate was only slightly higher than that of the provisional death rate for the general population in 1972. However, for infants who returned to their home environment after hospital birth and particularly for infants one month through eleven months of age, the death rate was over two times that of the comparable age group in the general population. This condition is in large part associated with the lack of sanitation facilities in Indian homes and extremely crowded living conditions.

3. In 1973 approximately 20 percent of the Indian patients discharged from IHS and contract hospitals were treated for infectious diseases (respiratory, other infective and parasitic, and skin diseases) and their residuals. Most of these are associated with lack of running water, insanitary conditions, and an overcrowded home environment.

ENVIRONMENTAL CONDITIONS

Contributing to these health problems is the widespread scarcity of safe water available to Indians and Alaska Natives for even elemental household purposes. Thousands of Indians on many reservations still haul water for home use for distances of a quarter of a mile or more. In such instances, use of water for domestic purposes is much less than the amount used by families in the non-Indian population. Contaminated streams, irrigation ditches, stock ponds, and unprotected wells and springs are often the only available supply. The excessive amount of time which Indians and Alaska Natives must thus spend combating the rigors of their environment is another contributing factor to the continuing impoverished conditions under which they live.

The lack of adequate facilities for the disposal of human and other household wastes also contributes to the health problems of the Indians and Alaska Natives. The absence of these facilities results in (1) spread of micro-organisms responsible for diarrheas and dysenteries; (2) insect and rodent infestations in Indian homes and communities; and (3) contamination of foods and domestic water supplies.

SANITATION FACILITIES PROJECTS

Public Law 86-121 enables the Indian Health Service to help alleviate the substandard environmental conditions that have been described. This law authorizes construction of domestic water supplies, waste disposal facilities and other essential sanitation facilities for Indian homes, communities, and lands.

Projects include one or more of the following features: water--source development, treatment, storage facility, distribution systems; waste (liquid and solid)--collection system, sewage treatment, disposal facility; household appurtenances--such as flush toilet or sanitary pit privy, kitchen sink, lavatory, and connecting plumbing.

INDIAN PARTICIPATION AND TRAINING

The Indian Health Service administers the program with the participation of Indian tribes, Alaska Native groups, and State and local health agencies. Participation by the Indians in project execution is stressed and tribes are equipped, trained and assisted to assume responsibility for continued operation and maintenance of completed community sanitation facilities. Education and training activities are also conducted for Indian householders to assure utilization, protection, and maintenance of household sanitation facilities.

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These efforts have produced an increasing awareness by the Indian people of the advantages of adequate sanitation facilities. Indian governing bodies have shown a willingness to adopt the necessary measures which are required for continued operation and maintenance of completed facilities. These measures include establishment of tribal utility organizations, appointment of responsible maintenance personnel. collection of water and sewer charges, and adoption of sanitation ordinances and/or regulations. Each of these embraces new concepts in Indian self-government.

CONSTRUCTION PROGRESS

Since the inception of this program in 1960 through fiscal year 1973, 1,763 sanitation projects have been undertaken. These include: 1,484 construction projects, (807 of which were associated with Federal and tribal housing projects) and 279 engineering investigations, emergency works, and other special projects. Of the 1,763 projects undertaken, 1,251 are completed or in operation, 447 were underway as of December 31, 1973, and 65 were in the final planning stages. With the completion of the above work and the projects to be initiated during fiscal year 1974, approximately 50,500 existing Indian and Alaska Native homes will have been provided new or improved sanitation facilities. In addition, facilities will have been constructed for approximately 40,000 new and improved homes built under Federal or tribal housing programs.

FISCAL YEAR 1974

The fiscal year 1974 appropriation of $36,179,000 for sanitation facilities construction included $31,945,000 for facilities to serve 8,500 new or renovated housing units being built under Federal and Tribal housing programs and for approximately 1,500 existing homes located within or adjacent to housing project sites. Also included in the fiscal year 1974 appropriation are: $3,779,000 for projects to construct facilities for approximately 1,989 existing homes at other locations and $455,000 for emergency works and special projects.

FISCAL YEAR 1975
Sanitation Facilities for new or renovated housing constructed by other agencies and existing homes at the same locations

The request for sanitation facilities of $40,521,000 includes $33,046,000 to assist Federal (HUD and BIA) and Tribal housing programs during FY 1975 which will permit the Indian Health Service to participate in the provision of sanitation facilities for approximately 8,000 new or renovated housing units and approximately 1,500 existing homes within or adjacent to housing project sites. In accordance with a mutual agreement with the Department of Housing and Urban Development, and the Bureau of Indian Affairs, the Indian Health Service is responsible for funding the construction of all off-site facilities required to serve the housing units. The Indian Health Service is responsible for conducting site investigations, soil-tests, and providing construction inspection of sanitation facilities for all new housing built by housing authorities. The

agency responsible for house construction provides interior fixtures and plumbing. Sanitation facilities located on the house lot and within the housing project site boundaries are funded by local housing authorities when the housing project comes under programs of the Department of Housing and Urban Development. Except for interior plumbing the Indian Health Service provides all facilities for homes constructed or improved by the Bureau of Indian Affairs.

Other Sanitation Facilities Construction Proposed for 1975

The request also includes $7,000,000 for projects to provide new or improved sanitation facilities for approximately 3,525 existing Indian and Alaskan homes and communities not associated with housing program activities.

Special Projects

The request further includes $475,000 to provide for: construction of sanitation facilities for Indian ceremonial areas and for tribal buildings used for community gatherings; investigation and planning funds for urgently needed construction projects for which additional technical information is necessary before a solution can be recommended; correction of emergency problems related to Indian sanitation facilities such as occur from severe drought conditions, floods, failure of well casings and pumping equipment; and other unforeseen conditions which may require provision of materials, supplies and equipment for completing the construction or maintenance and repair of sanitation facilities serving Indians and Alaska Native communities.

The following table reflects the number of homes included in projects for FY 1973 - 1975:

Number of Indian Homes Benefited

	Fiscal Year Program 1973 Actual	1974 Estimate	1975 Estimate
Projects to assist Federal and Tribal Indian housing programs:			
(a) New and improved homes (HUD, BIA, Tribal and other)	7,882	8,500	8,000
(b) Existing homes served in conjunction with housing programs	2,033	1,500	1,500
Sub-total	9,915	10,000	9,500
Regular Projects for existing homes:			
(a) Water or waste or both	1,325	900	1,855
(b) Improved facilities or service	2,672	1,089	1,670
Sub-total	3,997	1,989	3,525
Total	13,912	11,989	13,025

1975 REQUEST SUMMARY

- Projects to assist Federal and Tribal Housing Programs for Indians	
(a) 8,000 new or improved housing units	$ 24,846,000
(b) 1,500 existing homes located within or adjacent to housing project sites	8,200,000
	$ 33,046,000
- Regular projects to serve 3,525 existing homes and communities in other locations	7,000,000
- Special projects for engineering investigations, emergency works, tribal buildings and ceremonial grounds, supplies and equipment and unforeseen conditions	475,000
Total	$ 40,521,000

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
INDIAN EDUCATION

HIGHLIGHT STATEMENT

Priorities in Indian Education

The 1975 budget recommends $42,000,000 for special projects under the Indian Education Act (P.L. 92-318, Title IV) which address the educational needs of American Indians. The Federal role, as reflected by the budget, will focus upon institutional reform in an effort to improve the delivery of educational services to Indians and to develop useful curricula for Indian students.

To accomplish these objectives, the budget recommends $32,000,000 for Part B of the Act which authorizes the Commissioner of Education to carry out a program of improving the educational opportunities of Indian children by making grants to (1) support planning, pilot, and demonstration projects; (2) develop models for regular school programs in which Indian children are educated; (3) establish and operate preservice and inservice training programs for educational personnel; and (4) provide services not otherwise available, and disseminate information and materials which may offer educational opportunities to Indian children. These grants, awarded on a competitive basis, are aimed primarily at Indian tribes and organizations as well as to State and local educational agencies.

In addition, $8,000,000 is requested for Part C to provide for the support of adult education projects, particularly in the areas of literacy and high school equivalency training. Preference is given to Indian tribes, institutions, and organizations in awarding grants under this part of the Act. Plans include the development of models that explore a delivery mechanism, English as a second language, literacy equivalency testing methods, and legal and consumer education.

To ensure that the educational views of the Indian community are represented, Part D of the Indian Education Act provides for the establishment of the Office of Indian Education within the Office of Education. This office, which administers the project authorities of the Act, is under the direction of a Deputy Commissioner for Indian Eduation appointed by the Commissioner of Education from a list of names submitted by the National Advisory Council on Indian Education.

The National Advisory Council on Indian Education is also established under Part D. The law stipulates that the Council be made up of 15 persons who are Indians or Alaska Natives, and that members be appointed by the President from lists supplied by Indian tribes and organizations. Appointments to the Council are to represent "diverse geographic areas" of the nation. The 1975 budget recommends $2,000,000 for program administration and for the National Council.

In addition to funds for special projects under the Indian Education Act, Indian pupils will also be eligible for Federal education dollars under other programs directed toward the poor, educationally disadvantaged, handicapped, non-English speaking, and postsecondary students. In fiscal year 1975, in addition to funds requested under the Indian Education Act, about $145,000,000 will be available to help Indian students under various authorities in the Office of Education, such as Title I of the Elementary and Secondary Education Act. Further, under the Johnson-O'Malley Act of 1927 which is administered by the Bureau of Indian Affairs, funds are provided to local school districts where reservation-based Indians attend public schools.

Indian Participation in the Educational System

The Indian population is among the most deprived and isolated of the minority groups in the nation. The need for a program of educational assistance for Indians is illustrated by the following statistics:

The total Indian population is estimated to be more than 793,000. About half the American Indian population is age 17 or younger. (In contrast, the median age for the U.S. population as a whole is 28 years.) Thus, the importance of the educational process, central for any social, national, or cultural group, is pivotal for the American Indian.

Available estimates of the number of school age children defined as Indian vary, increasing as they become more recent. Official 1968 estimates placed the school age population at that time at over 150,000. More recently, in its fall 1973 survey of Indian children enrolled in public schools, the Office of Indian Education found 270,000 students.

The number of children "not in school" has been estimated to be as high as 16,000, with about half the cases due to a lack of school facilities which can serve these children.

Retention and Drop-out Rates

Participation statistics in general show a gradual increase in the attendance and "holding power" of Indians in schools, but still at levels behind the overall population.

Data on dropout rates show that about 50 percent of the Indian population fails to complete all 12 grades of school (though some estimates suggest a recent improvement in this figure). The dropout rate takes its toll at each grade level, but peaks in intensity in the high school years when the Indian rate rises to 60 percent. However, recent studies also show an increasing proportion of Indian youth attending and graduating from high school. Studies conducted in 1968 showed that about 55 percent of Indian youth who had been eighth graders in 1968 had graduated from high school.

Data on college attendance show that only 1 to 4 percent of the American Indians who enter first grade finish college, as opposed to about 20 percent of the U.S. population at large (1968-69 figure). The number of American Indians in college, although small, has increased. Less than 200 Indians were in college in 1950; yet by 1959 more than 4,300 were attending colleges and universities.

Achievement Measures

Twenty years ago, a nationwide testing program carried on by the Bureau of Indian Affairs (1951-54) showed Indian school children to be below national norms after the fourth grade. The findings of this study have been corroborated through the study of another national sample.

The 1966 Coleman Report (Equality of Educational Opportunity) studied such achievement measures as reading comprehension, mathematics, verbal ability, non-verbal ability, and general information, in a large national sample of sixth, ninth, and twelfth grades. The results established that the American Indian (like other minority groups studies) scores significantly lower at every grade level than does the average white pupil. Further, the degree of lag was greater at the twelfth grade than the first, which means that Indian children lose ground the longer they stay in school.

Special Problems of Indian Education

A number of measures suggesting the educational needs and problems of American Indians were reported in the chapter on "American Indian Pupils" of the 1970 Survey of Comprehensive Education. The study is based upon a national sample of over 23,000 American Indian children who were in the second, fourth, and sixth grades in 1968-69. The schools employed in the sample were participants in programs under Title I of the Elementary and Secondary Education Act of 1965 which supports remedial and compensatory programs with Federal funds. The major findings include the following:

Educational background of parents is relatively low. Thirty-six percent of the parents did not continue beyond grade school.

Reported parental incomes and occupational level is correspondingly low. About 63 percent of families report incomes not exceeding $6,000.

Reading below grade level is a serious problem. Teachers report that 38 percent of second and fourth graders, and 34 percent of sixth graders, are reading below grade level.

Mathematics development is also a problem. The proportion of Indian children with special needs in mathematics rises from 32 percent in the second grade, to 41 percent in the fourth grade, to 46 percent in the sixth grade.

Special needs in language development increases throughout the grades. For language, the percent with critical needs rises from 31 percent (second grade) to 37 percent (fourth grade) to 46 percent (sixth grade).

Teacher-parent interaction is low. Nearly 40 percent of the cases had no teacher-parent contact regarding pupil progress, and nearly 70 percent had no contact regarding behavior. Of the contacts which did occur, the majority occurred only once.

Federal Assistance for Indian Education

The sketch of American Indian education given in the previous sections suggests problems at all levels of schooling. Because of the youth of the Indian population and the large number of school age Indian children, education is one of the primary resources available to the modern Indian to improve the quality of life for himself and for his children.

In order to improve the quality of education of the Indian population, information is needed about effective educational practices and delivery systems for American Indians. Improved information is also necessary to determine what constitutes a good Indian education curriculum. To meet these needs, the 1975 budget proposes to concentrate funds on the special project authorities in Parts B and C of the Indian Education Act rather than requesting funds for Part A which would provide funds on a formula basis to local educational agencies. This focus will provide the Indian community with an opportunity to play a significant role in the development and operation of educational programs directed toward their needs. Together with funds from other Office of Education programs and from the Bureau of Indian Affairs, progress should be made in finding solutions to the educational problems of the American Indian.

Indian Education

Appropriation, 1973		$ 18,000,000
Total amount available		18,000,000
Appropriation, 1974	$ 40,000,000	
Comparative transfer from Office of Education "Salaries and Expenses", excluding amount withheld pursuant to P.L. 93-192 ($93,000)	+ 1,759,000	
Total amount available, 1974		41,759,000

Summary of Increases and Decreases, 1975

Special Projects	
To provide for program increases for planning, pilot, and demonstration projects for Indian children ($20,000,000) and for improving employment and educational opportunities for Indian adults ($5,000,000)	+25,000,000
Net change	+25,000,000
Payment to Local Educational Agencies for Indian Education	
No funds are requested for this authority in the 1975 budget. Funding of Indian Education activities will be accomplished through the Special Projects authority	-25,000,000
Net change	-25,000,000
Program Administration	
To provide for mandatory increase	+ 241,000
Net change	+ 241,000
Net change, 1975	+ 241,000
Budget estimate, 1975	42,000,000

Analysis by Activities

Activity	Amount Available 1973	Amount Available 1974	Estimate 1975	Increase (+) Decrease (-)
Special Projects	$ 5,440,000	$ 15,000,000	$ 40,000,000	+$25,000,000
Payments to Local Educational Agencies for Indian Education	11,496,807	25,000,000	---	-25,000,000
Program Administration	658,961	1,759,000 1/	2,000,000	+ 241,000
Sub-total - obligations	17,595,768	41,579,000	42,000,000	+ 241,000
Unobligated balance lapsing	404,232	---	---	---
Budget authority	18,000,000	41,759,000	42,000,000	+ 241,000

1. Special Projects

Sub-Activity	Amount Available 1973	Amount Available 1974	Estimate 1975	Increase (+) Decrease (-)
(a) Special projects for Indian children	$ 5,000,000	$ 12,000,000	$ 32,000,000	+$20,000,000
(b) Special projects for Indian adults	440,000	3,000,000	8,000,000	5,000,000
	5,000,000	15,000,000	40,000,000	+25,000,000

1/ Reflects a 1974 comparative transfer, -$1,759,000; from "Salaries and Expenses, Office of Education"

1. Special Projects
SUMMARY OF CHANGE

Program
Increases:

Expansion of special projects for Indian children.....	$20,000,000
Expansion of special projects for Indian adults.....	5,000,000
Total, program increases.....	25,000,000
Total increase.....	25,000,000

(a) Special projects for Indian children--The 1974 estimate of $32,000,000 provides an increase of $20,000,000 over the 1974 estimate of $12,000,000.

Need for increase

The requested increase consists of:

Program
Increases:

Expansion of special projects for Indian children	$ 20,000,000
Total, program increase	20,000,000
Total increase	20,000,000

Part B of the Indian Education Act authorizes grants to support planning, pilot, and demonstration projects to test and demonstrate the effectiveness of programs for improving educational opportunities for Indian children, to provide services not otherwise available, and to assist in the development and operation of preservice and inservice training programs for educational personnel. Grants are made, upon receipt of applications and approval by the Commissioner of Education, to Indian tribes, organizations and institutions, State and local educational agencies, and Federally supported elementary and secondary schools for Indian children.

Plan of Work

In order to improve accessibility to the school structure by the Indian community, the requested appropriation for fiscal year 1975 will be used for the following purposes:

1. To improve the image and understanding of the school system and its personnel among the Indian community, $10,000,000 will be used to train Indian teachers and administrators. The funds will be distributed in the following manner: $5,500,000 for classroom personnel, $3,000,000 for special services personnel and $1,500,000 for administrators.

2. To improve the educational opportunities of the Indian child, $6,000,000 will be used to begin the development of new approaches to the delivery of educational services. Because of their physical isolation, many Indian communities lack the full range of educational opportunities. Therefore, new ways must be found to improve their availability.

3. To improve the delivery of comprehensive educational and social services, $6,000,000 will be used to test models of the "community school approach", stressing educational programs at all age levels, from pre-school through community college. One approach will be developed to provide Indians residing in urban areas with an educational experience to meet their needs through a revised

curriculum depicting the transitional problems of Indians migrating to the cities and their expected role in urban community life, while preserving their cultural heritage.

4. To improve the readiness of the Indian child for school, $5,000,000 will be used to develop various approaches for pre-school education. The Indian child who is already in school, but who has not progressed past the third grade in building these approaches will also be involved. An attempt will be made to have the Indian community develop early childhood approaches building from the present knowledge bases which have been assembled from the other compensatory educational programs.

5. To improve the educational attainment of Indians, $5,000,000 will be devoted to the development of teaching techniques that stress basic skills development.

SPECIAL PROJECTS FOR INDIAN CHILDREN (PART B)

Number of Projects Funded

1973 Actual	1974 Estimate	1975 Estimate
51	120	60

FY 1973 PART B PROJECTS BY STATE

State	Number of Projects	Total Amount
Alaska	1	$ 200,000
Arizona	7	994,239
California	4	582,116
Colorado	2	250,000
Florida	1	30,539
Kansas	1	50,000
Maine	1	44,819
Massachusetts	1	125,000
Minnesota	4	380,432
Montana	1	164,170
Nebraska	1	25,000
Nevada	3	75,000
New Mexico	5	688,600
New York	3	266,273
North Carolina	1	75,000
Oklahoma	5	379,600
Oregon	3	186,232
South Dakota	1	66,780
Washington	2	70,000
Wisconsin	3	296,200
Wyoming	1	50,000
TOTAL	51	$ 5,000,000

(b) Special projects for Indian adults - The 1975 estimate of $8,000,000 provides an increase of $5,000,000 over the 1974 estimate of $3,000,000.

Need for increase
The requested increase consists of:

Program	
Increases:	
Expansion of special projects for Indian adults	$5,000,000
Total, program increase	5,000,000
Total increase	5,000,000

Part C of the Indian Education Act supports projects designed to improve the employment and educational opportunities for adult Indians. Grants are made, upon receipt of applications and approval by the Commissioner of Education, to Indian tribes, organizations and institutions, and State and local educational agencies.

Plan of Work

In order to improve the access of the adult Indian to the economy and social structure, in fiscal year 1975, $8,000,000 for Part C will be devoted to developing approaches and techniques that result in the creation of a delivery system for the education of the adult Indian, through projects that stress system reform, English as a second language, literacy equivalency testing methods, and legal and consumer education. In addition, a survey of adult Indian education in the Nation will be conducted to help determine the directions this program might take in future years.

SPECIAL PROJECTS FOR INDIAN ADULTS (PART C)

Number of Projects Funded

1973 Actual	1974 Estimate	1975 Estimate
10	30	25

LIST OF FY 1973 PART C PROJECTS

1. Stanislaus Chapter, California Indian Education Association - Modesto, California
   Training Project in Communication Skills and Educational Improvement

2. East Point Community Action Committee - Carrabelle, Florida
   Indigenous Community Education Program

3. Northern Cheyenne and Crow Tribes - Lame Deer, Montana
   A Proposal for a Northern Cheyenne and Crow Indian Adult Education Field Staff Training and G.E.D. Intensification Project

4. St. Paul American Indian Center - St. Paul, Minnesota
   Plan and Demonstrate a System for Career Development Programs, To Reach and Motivate Unemployed or Underemployed Young Indian Adult and Highschool Dropouts Living in Metropolitan Area

5. American Indian Law Students Associations, Inc. - Albuquerque, New Mexico
   Legal Literacy Programs for Indians

6. Pueblo of Zuni - Zuni, New Mexico
   Zuni Learning Center

7. Sisseton-Wahpeton Sioux Tribe - Sisseton, South Dakota
   Adult Learning Center Pilot Project

8. Utah Navajo Development Council - Clanding, Utah
   Functional Oracy - Literacy Proposal

9. Nooksack Board of Trustees - Everson, Washington
   Adult Education Survey and Demonstration Project

10. Coalition of Eastern Native Americans - Washington, D.C.
    Adult Motivational Education Program for Eastern Native Americans

ITEMIZATION OF ESTIMATE

Special Projects

Obligations by Object	Actual 1973	Amount Available 1974	Estimate 1975	Increase (+) Decrease (-)
41 Grants, subsidies and contributions	$ 5,440,000	$15,000,000	$40,000,000	+$25,000,000
Net obligations	$ 5,440,000	$15,000,000	$40,000,000	+$25,000,000

Payments to Local Educational Agencies for Indian Education - The 1975 budget requests no funds for this authority. Instead the budget proposes shifting funds to the Special Projects authority.

Part A of the Indian Education Act is authorized to grant financial assistance to local educational agencies for elementary and secondary programs to meet the special educational needs of Indian children. In addition to the amount appropriated for local educational agencies, five percent is reserved for grants to non-local educational agencies which are primarily Indian tribes and organizations. Grants are made to applicant local educational agencies according to the number of Indian students enrolled multiplied by the State average per pupil expenditure.

Plan of Work

Part A is a service-oriented program, but because of the lack of effective educational materials and delivery systems for the American Indian--essential components of a service program--the funds for Part A cannot be used in an effective manner. Further, support for services for Indians is provided under a number of other Office of Education programs, as well as programs administered by the Bureau of Indian Affairs. Therefore, no funds have been requested for this program in fiscal year 1975. Instead, the 1975 budget proposes to concentrate funds under Parts B and C in order to demonstrate effective educational techniques and practices for Indian Education. The Federal role reflected by this strategy involves focusing upon institutional reform in an effort to improve the delivery of educational services to Indians. Institutional reform can only occur when knowledge available about Indian education and the quality of Indian education programs has been improved.

Significant numbers of Indian children will continue to receive educational services under other Federal programs such as the Johnson O'Malley programs in the Bureau of Indian Affairs and under the Office of Education's proposed educational grants consolidation.

ITEMIZATION OF ESTIMATE

Payments to Local Educational Agencies for Indian Education

Obligations by Object	Actual 1973	Amount Available 1974	Estimate 1975	Increase (+) Decrease (-)
41 Grants, subsidies and contributions...	$11,496,807	$25,000,000	---	-$25,000,000
Net obligations..	$11,496,807	25,000,000	---	- 25,000,000

FUNDING PATTERN FOR PART A

	1973			1974 Estimate		
	Number of Applications Received	Number of Grants Awarded	Total Funds Awarded	Number of Applications Received	Number of Grants Awarded	Total Funds Awarded
LEA's	553	436	$10,949,189	1,300	1,050	$23,809,523
Non-LEA's	26	10	547,618	35	25	1,190,477
Total	579	446	$11,496,807	1,335	1,075	$25,000,000

NON-LEA's FUNDED UNDER PART A IN FY 1973

Miccosukee (Florida)	$ 3,631
Busby School (Montana)	50,836
Ramah Navajo School (Arizona)	51,105
Rock Point School (Arizona)	132,133
Rough Rock Demonstration School (Arizona)	208,314
Wind River Indian Assn. (Wyoming)	8,650
United Tribes of North Dakota (North D.)	3,272
Red Cloud Indian School (South Dakota)	38,000
Devil's Lake Sioux (North D.)	18,744
Blackfeet Free School (Montana)	32,933
Total	$547,618

INDIAN EDUCATION

3. Program Administration

	Actual 1973	Amount Available 1974	Estimate 1975	Increase (+) Decrease (-)
Program Administration	$658,961	$1,759,000	$2,000,000	+ $241,000

The 1975 estimate of 50 positions and $2,000,000 provides an increase of $241,000 over 1974.

Need for increase

The requested increase consists of:

Mandatory	
Increases:	
Annualization of new positions funded for part of 1974	$248,000
Total mandatory increase	248,000
Program	
Increases:	
Increased support for the National Advisory Council on Indian Education	65,000
Total program increase	65,000
Total increase	313,000
Mandatory	
Decreases:	
Decrease in equipment purchases after start-up costs	-8,000
Decrease in renovation costs after start-up costs	-37,000
Decrease due to second year rental charges being included in the Standard Level Usage Charge (SLUC) system in the Office of Education's "Salaries and Expenses" appropriation account in 1975	-27,000
Total mandatory decrease	-72,000
Net increase	241,000

Part D of the Indian Education Act refers to the General Education Provisions Act (Sections 400(c), 411, and D) as authority for funds to operate the Office of Indian Education and the National Advisory Council on Indian Education. Funds appropriated for this activity support the salaries, travel, and other administrative expenses for the Office and the Council, as well as planning and evaluation studies necessary for program support.

Plan of Work

In order to improve the access of the Indian child to the existing school structure, the Office of Indian Education will perform the following activities:

1. Staff the Office of Indian Education at a level of 50 fulltime positions.

2. Develop program support packages that would be of assistance in local project operations.

3. Conduct studies into program delivery systems and identify successful and effective projects funded under the Act. ($210,000)

4. Monitor and make plans for the program's functioning. Specifically, successful Part B and Part C projects would be studied to find methods by which they could be adapted by local school systems as part of their regular school program. ($300,000)

5. Fund the 15 member National Advisory Council on Indian Education so that it might fulfill its legally mandated requirements. ($225,000)

ITEMIZATION OF ESTIMATE
Program Administration

Obligations by Object	Actual 1973	Amount Available 1974	Estimate 1975	Increase (+) Decrease (-)
11 Personnel compensation	$ 531	$751,000	$943,000	+ $192,000
12 Personnel benefits.....	31	63,000	79,000	+ 16,000
21 Travel and transportation of persons.....	9,398	49,000	62,000	+ 13,000
22 Transportation of things.....	---	3,000	4,000	+ 1,000
23 Rent, communications, and utilities.....	---	54,000	68,000	+ 14,000
24 Printing and reproduction.....	---	42,000	52,000	+ 10,000
25 Other services.....	644,535	766,000	767,000	+ 1,000
26 Supplies and materials.....	---	7,000	9,000	+ 2,000
31 Equipment.....	4,466	24,000	16,000	- 8,000
Net obligations.....	$658,961	$1,759,000	$2,000,000	+ $241,000

Indian Education

Obligations by Object	Actual 1973	Amount Available 1974	Estimate 1975	Increase (+) Decrease (-)
11 Personnel compensation	$ 531	$ 751,000	$ 943,000	+$192,000
12 Personnel benefits	31	63,000	79,000	+ 16,000
21 Travel and transportation of persons	9,398	49,000	62,000	+ 13,000
22 Transportation of things	---	3,000	4,000	+ 1,000
23 Rent, communications, and utilities	---	54,000	68,000	+ 14,000
24 Printing and reproduction	---	42,000	52,000	+ 10,000
25 Other services	644,535	766,000	767,000	+ 1,000
26 Supplies and materials	---	7,000	9,000	+ 2,000
31 Equipment	4,466	24,000	16,000	- 8,000
41 Grants, subsidies and contributions	16,936,807	40,000,000	40,000,000	---
Net obligations	17,595,768	41,759,000	42,000,000	+ 241,000

Indian Education

Summary of Positions and Average Employment

Activity	1973	1974	1975
Positions			
Special Projects:			
(a) Indian children	---	---	---
(b) Indian adults	---	---	---
Total Special Projects	---	---	---
Payments to Local Educational Agencies for Indian Education	---	---	---
Program Administration	---	50	50
Total	---	50	50
Average Employment			
Special Projects:			
(a) Indian children	---	---	---
(b) Indian adults	---	---	---
Total Special Projects	---	---	---
Payments to Local Educational Agencies for Indian Education	---	---	---
Program Administration	---	39	54
Total	---	39	54

COMMISSION OF FINE ARTS

SALARIES AND EXPENSES

Appropriation/ Total available, 1973		$135,000
Appropriation/ 1974	$143,000	
Proposed supplemental for civilian pay cost increases (January and October pay raises)	10,000	
Total available, 1974		153,000

Summary of Increases and Decreases, 1975

	Base for 1975	Increase 1975	
Administration:			
Increase in Commission's Operating Expenses	$153,000	$+23,000	$23,000
Budget estimate, 1975			176,000

Analysis by Activity

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
Administration	$134,673	$153,000	$176,000	$+23,000
Unobligated balance lapsing	327	---	---	---
Total	135,000	153,000	176,000	+23,000

JUSTIFICATION

Administration: Fiscal year 1974, $153,000; fiscal year 1975, $176,000; increase, $23,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$+9,000	--	$176,000	7	To provide for increased salary, printing and related staff support.
+14,000	--			Reimbursement for space, services and facilities provided by GSA.
+23,000	--			

The Commission of Fine Arts was established in 1910 to fill the need for a permanent advisory agency whose members would be qualified to make available to the Government expert opinion on questions of art arising in the course of

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administration. As an independent agency, it is intended to serve a two-fold purpose; first, to give advise concerning aesthetic standards and matters of civic design involved in the orderly development of the District of Columbia; and second, to furnish expert opinion on questions of art to the President, to the Congress and its committees, and to the heads of various departments and agencies of the Federal and District Governments.

The Commission is composed of seven members, appointed by the President, who serve without compensation, receiving only actual travel expenses incurred in attending meetings. Since the Commission was established in 1910, more than 75 distinguished architects, landscape architects, painters, sculptors, and laymen in the field of fine arts have given freely to the Government the benefit of their experience and professional skills in advising the President, the Congress, and government agencies on matters involving the fine arts.

The specific functions of the Commission are as follows:

1. To advise generally upon questions of art when requested to do so by the President, heads of executive departments or by any Committee by either House of Congress.

2. To advise specifically on all plans for parks, public buildings, and other structures constructed by executive departments or the District of Columbia.

3. To advise upon location of statues, fountains, and monuments in public squares, streets and parks in the District of Columbia and upon the selection of models for the statues, fountains, and monuments erected under the authority of the United States and upon the selection of artists for execution of the same.

4. To regulate the height, exterior design and construction of private and semi-public buildings in certain areas of the National Capital. This action requires review and recommendation of the Mayor of the District of Columbia on the merits of designs submitted for building permits.

5. To advise, as necessary, on projects of an important Federal character outside of the District of Columbia, and to render opinions on the merit of designs for medals, insignia, coins, or other art projects created and produced by the executive department.

The Commission of Fine Arts is requesting an appropriation of $176,000 for fiscal year 1975 to finance the expenses of the seven members of the Commission and the salaries and related costs necessary to finance a supporting staff of seven permanent positions. The largest portion of the increase, approximately $14,000, will be needed to cover newly enacted public law 92-313 which requires user charges for space, services, and facilities to be reimbursed to the Federal Buildings Fund administered by the General Services Administration. Of the remaining $9,000 increase, $5,000 is needed for increased salary costs and $4,000 for increased printing expenses.

PERSONNEL SUMMARY

	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions	6	7	7
Full-time equivalent of other positions	1	--	--
Average paid employment	7	7	7
Average GS grade	10.2	9.9	9.9
Average GS salary	$16,303	$16,481	$16,781

ITEMIZATION OF ESTIMATE

Appropriation Title: Salaries and Expenses — Commission of Fine Arts

	1973 Actual	1974 Estimate	1975 Estimate	Increase (+) or Decrease (-)
Program and Financing:				
Total obligations	$134,673	$153,000	$176,000	$+23,000
Unobligated balance lapsing	327	---	---	---
Budget authority (appropriation)	135,000	153,000	176,000	+23,000
Object Classification:				
11. Personnel compensation	104,625	119,000	123,000	+4,000
12. Personnel benefits	8,302	9,000	10,000	+1,000
21. Travel	2,757	4,000	4,000	---
23. Rent, communications, and utilities	2,371	2,000	16,000	+14,000
24. Printing and reproduction	6,718	8,000	11,000	+3,000
25. Other services	8,448	7,000	8,000	+1,000
26. Supplies and materials	1,354	3,000	3,000	---
31. Equipment	98	1,000	1,000	---
Total Obligations	134,673	153,000	176,000	+23,000

INDIAN CLAIMS COMMISSION

JUSTIFICATION OF 1975 BUDGET ESTIMATE

Requirements for FY 1975. The Indian Claims Commission is requesting an appropriation of one million three hundred and thirty three thousand dollars, of which $1,155 thousand is for personnel costs and $178 thousand is for other purposes.

Establishment and Adjudicatory Duties of the Commission. The Indian Claims Commission is an independent quasi-judicial agency, created by the Indian Claims Commission Act of August 13, 1946, (60 Stat. 1049), codified as Section 70 of Title 25, United States Code. The Commission consists of five members appointed by the President by and with the advice and consent of the Senate. It is responsible for the hearing and adjudication of claims existing up to and including August 13, 1946, as defined under Section 2 of the Act.

Status of Work. A total of 611 claims of Indian Tribes, bands or other identifiable groups of American Indians have been docketed. On December 31, 1973, 408 dockets had been finally disposed of, and 203 dockets were pending.

OBJECT CLASSIFICATION STATEMENT

11. Personnel Compensation. It is estimated that $1,065 thousand will be required for personnel compensation. The increase of $65 thousand over FY 1974 will cover the full-year cost of the October 1973 general salary increase and provide for essential individual increases.

12. Personnel Benefits. It is estimated that $90 thousand, an increase of $11 thousand, will be required to cover the Government's contribution, in accordance with existing legislation, to employees' group life insurance, group health benefits, retirement, and FICA taxes.

21. Travel and Transportation of Persons. The Commission may require up to $15 thousand for travel, principally for the conduct of hearings in the field. This amount is unchanged from FY 1974.

23. Rent, Communications, and Utilities. It is anticipated that $103 thousand, an increase of $88 thousand, will be required for these expenditures. Rent, a new item, will require $83 thousand; and an estimated additional $5 thousand is needed for increased costs of telephone service including FTS, telegraph service and penalty mail.

24. Printing and Reproduction. It is estimated that $1 thousand will again be required for this object to cover the cost of obtaining stationery and other material printed or bound outside the Commission.

25. Other Services. It is estimated that $44 thousand, an increase of $2 thousand, will be required for this object to cover such costs as court reporting services; xerox rental; maintenance of office machines; and other administrative services.

26. Supplies and Materials. It is anticipated that $11 thousand will be required to cover the cost of miscellaneous office supplies. This represents an increase of $1 thousand.

31. Equipment. It is estimated that $4 thousand will be needed for this purpose. The additional $2 thousand will permit needed replacement of obsolescent office machines.

SALARIES AND EXPENSES

Appropriation FY 1973	$1,075,000
Appropriation FY 1974	1,164,000*
Budget Estimate FY 1975	1,333,000

* Including proposed $78,000 supplemental.

REQUIREMENTS FOR FISCAL YEAR 1975

The estimate for funds allowed by the Office of Management and Budget to operate the Indian Claims Commission in fiscal year 1975 is $1,333,000.

SUMMARY OF INCREASES, 1975
(in thousands of dollars)

Personnel Compensation	+65
Personnel Benefits	+11
Travel	0
Rent, Communications and Utilities	+88
Printing and Reproduction	0
Other Services	+2
Supplies and Materials	+1
Equipment	+2
	+169

PERSONNEL COMPENSATION
(dollar amounts in thousands)

	1973 Actual	1974 Estimate	1975 Estimate	Change in 1975 from 1974
1. Number of permanent positions	42	42	42	0
2. Number of other positions	2	2	2	0
3. Salary cost of permanent positions	$986	$1,059	$1,134	+$75
4. Salary cost of other positions	$19	$20	$21	+$1
Total personnel services	$1,005	$1,079	$1,155	+$76

PERSONNEL SUMMARY

	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions	42	42	42
Full-time equivalent of other positions	2	2	2
Average paid employment	44	44	44
Average GS-grade	12.2	12.3	12.4
Average GS-salary	$18,355	$22,363	$23,077

OBJECT CLASSIFICATION
(in thousands of dollars)

		1973 Actual	1974 Estimate	1975 Estimate	Change in 1975 from 1974
11.	Personnel Compensation	$ 931	$1,000	$1,065	+65
12.	Personnel Benefits	74	79	90	+11
21.	Travel	6	15	15	0
23.	Rent, Comm. and Utilities	12	15	103	+88
24.	Printing and Reproduction	1	1	1	0
25.	Other Services	41	42	44	+2
26.	Supplies	8	10	11	+1
31.	Equipment	2	2	4	+2
	Total Obligations	$1,075	$1,164	$1,333	+$169

ANALYSIS BY ACTIVITIES

Activities	Amount Available 1973	Amount Available 1974	Estimate 1975	Change in 1975 from 1974
Hearing and adjudication of claims	$1,075,000	$1,164,000*	$1,333,000	+$169,000
Total	$1,075,000	$1,164,000	$1,333,000	+$169,000

*Including proposed $78,000 supplemental.

NATIONAL CAPITAL PLANNING COMMISSION

SALARIES AND EXPENSES APPROPRIATION
31-25-0103-0-1-909

ANALYSIS OF CHANGES IN REQUIREMENTS
(in thousands of dollars)

	Budget Authority
1973 total	$1,425
Decreases	
1976 Bicentennial Exhibit	-25
Increased productivity of personnel (positions downgraded as vacancies occur, etc.)	-20
Increases	
Funds for training employees to upgrade their skills	1
1976 Bicentennial Planning	32
Rental of 3,500 sq. ft. of additional office space	19
Reimbursement to U. S. Department of Labor, Office of Federal Employees' Compensation	1
Two new positions for 80% of Fiscal Year 1974*	22
Government cost, personnel benefits, for above	2
Related expenses for two new positions	2
1974 total	1,459
1974 appropriation adjustment, to Operating Expenses, Public Buildings Service, General Services Administration, (80 Stat. 674), for rental of office space	-19
1974 proposed supplemental for civilian pay act increases, effective January and October 1973, E.O. 11691 and E.O. 11739	111
1974 total, adjusted	1,551
Decreases	
1976 Bicentennial Planning	-32
Reimbursement to U. S. Department of Labor	- 1
Annual travel expenses for former Chairman, authorized beginning in Fiscal Year 1973, no longer required	- 9
Increases	
Annual payment required for rental of space from the General Services Administration, Public Law 92-313	164
*Remaining 20% of cost of two new positions authorized in Fiscal Year 1974 at 80% of cost	6
Four (4) new positions for 80% of Fiscal Year 1975	41
Government cost, personnel benefits, for above	3
Related expenses for 4 new positions, such as supplies, materials, telephones, etc.	3
Funds for "executive development" in accordance with provisions of OMB Bulletin No. 74-1, 7/30/73	3
Funds to offset increased cost of printing and binding, per GPO Circular Letter No. 103, 8/15/73 (17.3% increase on $54,000)	9
Nonrecurring increase of $3,000 for purchase of equipment	3
Nonrecurring increase of $10,000 for photogrammetric preparation of base maps in District of Columbia	10
Additional funds for contracting with Experts and Consultant firms.	30
Nonrecurring increase of $20,000 for printing and binding	20
In-grade raises due in Fiscal Year 1975	21
Annualization of salaries	18
1975 total	1,840

JUSTIFICATION FOR INCREASES

Rental of office space. General Services Administration, Public Buildings Service, has advised this Commission that cost for rental of office space and related services provided by GSA at approximate commercial equivalent rates effective July 1, 1974, under the provisions of Public Law 92-313, will be $188,294 for our 25,173 square feet. The office of Management and Budget has allowed us to ask Congress for $164,000. We understand that GSA is re-auditing space costs and hopefully their adjusted projection will not exceed $164,000. Our space constitutes the entire 10th floor at 1325 G Street, N. W., a private office building, and provides all the office space needed for Commission employees.

Financing balance of two new positions authorized in Fiscal Year 1974. Two new positions were authorized by the Congress in Fiscal Year 1974, but with only 80% of financing. This request provides financing for the remaining 20% so that the positions will be available 100% during Fiscal Year 1975.

Four new positions for 80% of Fiscal Year 1975 and related expenses.

1. Clerk-Typist, GS-5. The typing requirements of the Environmental Affairs Office can no longer be handled on a shared or a part-time basis. An additional professional employee granted in the Fiscal Year 1974 budget, plus the increased workload generated by the typing of draft and final Environmental Statements, necessitates a full-time clerical employee.

2. Urban Planner, GS-12. This position in the Federal Planning Division would initially be responsible for the development of a recommended six-year capital improvement programming system for Federal developments in the Region. It would enable the Commission to more fully carry out its statutory responsibilities under Section 7 of the National Capital Planning Act of 1952, as amended, which provides that "the Commission shall recommend a six-year program of public works projects which it shall review annually with the agencies concerned".

The establishment and maintenance of such a program will provide local and state governments and regional agencies a significant basis for planning and programming other developments in consonance with programmed Federal projects. In this way, the local support facilities related to proposed Federal developments--whether public utilities, transportation, housing, etc.--can be programmed by other public bodies and private groups and organizations to be available when needed.

3. Engineering Draftsman, GS-8. Since the volume of drafting services is continuing to increase at a rather substantial rate, the Cartographic Services Office requests an additional Engineering Draftsman to prepare detailed plans for various sections of the city, each of which requires substantial map preparation and cartographic work.

4. Urban Planner, GS-11. The request for this additional position for the Urban Renewal and Housing Division reflects the anticipated changing role of the Commission in urban renewal project planning in the District of Columbia. This one position requested under Salaries and Expense in Fiscal Year 1975 reflects a significant reduction from the nine authorized special Neighborhood Development Program project planning positions funded by the D. C. Redevelopment Land Agency in Fiscal Year 1973.

Funds for "Executive Development". This request for $3,000 is submitted in accordance with Office of Management and Budget Bulletin No. 74-1, dated July 30, 1973. A special report has been submitted on this subject.

Funds to offset increased cost of printing and binding. The Government Printing Office, in Circular Letter No. 103, dated August 15, 1973, advised this Commission that printing and binding costs between Fiscal Year 1973 and 1975 will increase 17.3%. Based on the Commission's recurring budget of $54,000 for printing and binding, this necessitates asking for an increase of $9,000 in order to purchase the same amount of printing and binding available in Fiscal Year 1973. No increase for this purpose was requested or received in the Fiscal Year 1974 budget.

Nonrecurring increase of $20,000 for printing and binding. The contract for the writing of "A History of Planning for the Nation's Capital" is in the final stages of development. It will be completed and approved for release for publication by the start of Fiscal Year 1975. The printing costs according to GPO will be approximately $31,800. We feel we can absorb all but $20,000 within our regular printing and publication budget. This is, therefore, a request for a nonrecurring increase of $20,000 to offset part of the cost of publishing this history.

Purchase of equipment. A recurring $5,000 is available annually for the purchase of equipment. This is a request for a nonrecurring increase of $3,000 for Fiscal Year 1975 to update some expensive drafting room and other equipment that will cause us to exceed our annual $5,000.

Photogrammetric preparation of base maps in District of Columbia. A nonrecurring increase of $10,000 is requested for this purpose in Fiscal Year 1975. A $27,500 contract for the major portion of this work was awarded in Fiscal Year 1973. This $10,000 will enable the project to be completed and all base maps brought up to date.

Additional funds for contracting with experts and consultant firms. A total of $35,000 is provided annually for this purpose. This amount is totally inadequate and an increase of $30,000 to $65,000 is requested.

NATIONAL CAPITAL PLANNING COMMISSION
FISCAL YEAR 1975 BUDGET
ANALYSIS BY OBJECT CLASSIFICATION -- SALARIES & EXPENSES APPROPRIATION
(Obligational Basis)

	Actual F.Y. 1973	Budgeted F.Y. 1973	Budgeted F.Y. 1974	F.Y. 1975 Increases	Est. F.Y. 1975
Permanent positions (net of lapses)	$1,004,339	$1,069,000	$1,174,125	$ 83,000	$1,257,125
Seasonal and temporary employees	17,150	16,000	17,000		17,000
Part time & WAE	299	1,500	1,500		1,500
Overtime & holiday pay	4,786	5,000	5,000		5,000
Total personnel compensation	1,026,574	1,091,500	1,197,625	83,000	1,280,625
Personnel Benefits	83,894	92,125	100,000	6,000	106,000
Awards to employees		500	500		500
Travel of Commission members	10,264	15,000	15,000	-9,000	6,000
Travel of staff	5,140	9,000	9,000		9,000
Vehicle rent	1,820	2,500	2,500		2,500
Transportation of household goods	153	7,000	7,000		7,000
Rental of office space from GSA				164,000	164,000
Rent, communications, utilities	32,886	31,485	36,130	1,000	37,130
Duplicating expenses	4,097	7,000	5,000		5,000
Printing and binding	44,764	53,623	54,000	29,000	83,000
Contracts with experts & consultants	32,408	35,000	35,000	30,000	65,000
Bicentennial planning	25,000	25,000	32,000	-32,000	00
Reporting services	7,371	10,000	10,000		10,000
Base maps of District of Columbia				10,000	10,000
Other services	16,444	11,500	12,250	2,000	14,250
Services of other government agencies	6,899	8,117	8,000		8,000
Supplies and materials	17,891	20,650	21,995	2,000	23,995
Equipment	4,320	5,000	5,000	3,000	8,000
Total, National Capital Planning Commission	1,319,925	1,425,000	1,551,000*	289,000	1,840,000
Permanent Full-Time positions		62	64	4	68

*Appropriation was $1,459,000 of which $19,000 was transferred to General Services Administration, Public Buildings Service for rent of additional office space, commencing with Fiscal Year 1974, under authority 80 Stat. 674. This figure includes an estimated pay increase supplemental of $111,000.

NATIONAL CAPITAL PLANNING COMMISSION

PROGRAM and PERFORMANCE

The National Capital Planning Commission was created by the National Capital Planning Act of 1952 (40 U.S.C. 71-71i; D.C. Code secs. 1-1001 to 1-1010) as the central planning agency for the Federal and District of Columbia Governments "to plan the appropriate and orderly development and redevelopment of the National Capital and the conservation of the important natural and historical features thereof." The Commission succeeded the National Capital Park and Planning Commission, established in 1926.

The Act has as its purposes the securing of comprehensive planning for the physical development of the National Capital and its environs, providing for the participation of the appropriate planning agencies of the environs in such planning, and establishing "the agency and procedures requisite to the administration of the functions of the Federal and District of Columbia Governments related to such planning." Accordingly, the Commission is "Charged with the duty of preparing and adopting a comprehensive, consistent, and coordinated plan for the National Capital * * *" and with reviewing and making recommendations on plans originated by Federal and District agencies for proposed developments and projects in the National Capital Region "in preliminary and successive stages."

Within the environs of the District of Columbia, general plans showing the location, character, extent, and intensity of use for proposed Federal and District developments are required to be reviewed by the Commission and, through the Commission, by the appropriate planning agency having jurisdiction over the affected part of the environs. The National Capital is defined in the Act as "the District of Columbia and territory owned by the United States within the environs" (environs means "the territory surrounding the District of Columbia included within the National Capital Region"); and the National Capital Region consists of the District of Columbia, Montgomery and Prince Georges Counties in Maryland, Arlington, Fairfax, Loudoun and Prince William Counties in Virginia, and all cities in Maryland and Virginia within the outer limits of such counties.

The Commission, in cooperation with the Council of Environmental Quality, also reviews and evaluates proposed District and Federal developments throughout the region in terms of their impact upon the quality of the environment in the National Capital. In addition, the Commission has added to its criteria for review of District and Federal installations the availability of low- and moderate-income housing and related facilities in areas reasonably accessible to the location of the subject projects.

Provisions of other laws--especially the zoning enabling act for the District of Columbia (D. C. Code secs. 5-701 to 5-719) and the District of Columbia Redevelopment Act of 1945, as amended (D.C. Code secs. 5-413 to 5-428)--place significant additional responsibilities upon the Commission. These include (1) making recommendations to the Zoning Commission of the District of Columbia on amendments to the text and maps of the Zoning Regulations and on large scale planned developments under section 7501 of the Regulations and to the Board of Zoning Adjustment on applications for certain uses required to be referred to the Commission under the Regulations; (2) adoption of boundaries of urban renewal areas and the preparation, adoption, and modification of urban renewal plans; (3) approval of the Permanent System of Highways Plan and amendments thereto (D. C. Code, secs. 7-108, 7-113, and 7-122); (4) recommendations on proposed street and alley closings (D. C. Code, sec. 7-401); (5) "in lieu of zoning" approval of Federal public buildings in the District of Columbia (D. C. Code, sec. 5-428); (6) approval of transfers of jurisdiction between Federal and District agencies over properties within the District of Columbia owned by the United States or by the District of Columbia (D. C. Code sec. 8-115); (7) approval of the sale of surplus District of Columbia property (D. C. Code sec. 9-301) and surplus park land under the jurisdiction of the National Park Service (D. C. Code, sec. 9-304); and (8) acquisition of land for the park, parkway and playground system of the National Capital (U.S.C. 72).

Organization of Commission

The Commission is composed of five eminent citizens, appointed by the President, who serve without compensation; five ex-officio members from executive agencies (the Chief of Engineers of the U. S. Army, the Mayor-Commissioner of the District of Columbia, the Director of the National Park Service, the Commissioner of Public Buildings, and the Director of Public Roads), and the Chairman of the Committees on the District of Columbia of the Senate and the House of Representatives.

The Commission meets monthly throughout the year to provide policy guidance for and coordination of the development programs in the District and the Region of District and Federal agencies and to review and adopt, approve, or make recommendations on matters upon which Commission action is required.

There are six standing committees of the Commission which meet regularly prior to Commission meetings. The committees review technical studies, receive recommendations of the staff, and prepare committee recommendations to the Commission. In addition, the Executive Committee, consisting of the Chairman, the Vice-Chairman, and one other member, and having authority to act on behalf of the Commission between meetings of the Commission, meets when necessary.

Professional Staff

The Commission employs a highly-trained professional staff to perform technical studies and prepare recommendations to the Commission and its committees, maintain records of its meetings, make general and special urban planning studies, prepare background information on matters which are to come before the Commission, and carry out policies, instructions, and programs of the Commission.

The staff participates actively in many coordinating groups, maintains liaison with numerous official agencies and conducts an active community relations program in order to effectuate the Commission's program.

Outside experts, who have special competence on particularly important problems, are retained on occasion.

Urban renewal planning activities are carried out in part with funds received from District agencies.

Planning and Programming Coordination

The Commission's Coordinating Committee, created under the authority of section 2(d) of the National Capital Planning Act of 1952, meets twice monthly to bring together representatives of many District, Federal and neighboring jurisdiction agencies to coordinate the review, study, and comment on development plans and programs for projects within the District of Columbia. The Committee is composed of representatives from various departments of the District of Columbia Government, National Park Service, Corps of Engineers, Public Buildings Service, National Capital Planning Commission staff, and when necessary, from the Redevelopment Land Agency, Architect of the Capitol, National Capital Housing Authority, Commission of Fine Arts, Maryland-National Capital Park and Planning Commission, and Arlington County Office of Planning.

The Chairman of the Commission is a member of the Land Committee of the Metropolitan Washington Council of Governments, and the Commission is represented on the Board of Directors of the United Planning Organization. The Executive Director of the Commission is a member of the Transporation Planning Board of the Council of Governments, the Mayor-Commissioner's Cabinet and Economics Development Committee, and represents the Mayor-Commissioner as ex-officio member of the Model Cities Commission.

In addition, the Council of Governments and the Commission have jointly formed a Regional Planning Directors Committee to review Federal and regional proposals and projects in the Washington Metropolitan Area.

PROGRAM BY ORGANIZATIONAL UNIT

I. Office of the Executive Director

The staff activities of the Commission are directed by professional urban planners. An Executive Director and two Directors constitute the supervisory personnel of the Executive Director's office. The Executive Director is responsible for all administrative functions not specifically reserved for the Chairman as head of the agency, and for all professional work of the staff.

This office formulates policy proposals on technical matters to present to the Commission; represents the Commission in carrying out its policies and programs; and supervises, coordinates, and reviews the work of the staff. The office provides staff leadership and direction to ensure that the professional program offers appropriate guidance to the community in urban planning and urban design.

The Administrative, Legal Services, and Public Affairs Offices are also a part of the Office of the Executive Director.

A. Administrative Services

Since the Commission is an independent agency, all administrative functions required of a Federal agency are carried out by its own staff, including financial management and accounting, budget preparation and control, personnel functions and records, time and leave, records management, space management, property records and accountability, and general administrative routines. Payrolling is handled by General Services Administration on its ADP equipment on a contract basis.

B. Legal Services, Commission Secretariat

The Office of the General Counsel and Secretary performs the following activities for the Commission:

1. Serves as secretariat and parliamentarian to the Commission and its several committees and to the Coordinating Committee;

2. Provides legal services on matters of agency administration;

3. Advises the Commission and its staff on the statutory powers, duties, and functions of the Commission and on legal questions in the fields of urban planning, urban renewal and housing, transportation and the preservation of open space, and of historic and architectural landmarks;

4. Serves as legislative counsel in review of proposed and pending legislation, in the preparation of Congressional testimony, and in statutory drafting;

5. Provides legal services in the acquisition by the Commission of lands for the park, parkway, and playground system of the National Capital.

C. Public Affairs Office

The Public Affairs Office performs the following activities for the Commission in implementing its program of public and community relations:

1. Conducts the Commission's publication program, editing and writing reports;

2. Provides information on Commission's policies, programs and activities to the press; community, students, and national and foreign visitors;

3. Maintains current information on community organizations in the National Capital and recommends forms of community involvement to the Commission and its staff in related programs and projects;

4. Arranges meetings and presentations of the Commission's plans and programs with other agencies and the public.

5. Assists in the coordination and exchange of information and views between the Commission and the District of Columbia Council, District and Federal agencies.

II. Long Range Planning and Regional Affairs

The long range planning and regional affairs activities stipulated in the National Capital Planning Act of 1952, are carried out by the technical staff in the Comprehensive Planning, Regional Affairs and Socio-Economic Research Divisions. Further technical support is provided by the Area Design, Historic Preservation, Cartographic and Library Offices. In addition, the Zoning and Development referrals of the D. C. Government are reported on by this staff.

The Director for Long Range Planning and Regional Affairs is responsible for the direction and supervision of the Divisions and Offices described below:

A. Special Assistant for Zoning and Development

This office has continuing responsibility for processing and making recommendations on zoning referrals from the District of Columbia Board of Zoning Adjustment and the District of Columbia Zoning Commission. The Special Assistant also serves as the Planning Commission's representative on the Board of Zoning Adjustment and the Zoning Advisory Council. During Fiscal Year 1975, the Special Assistant will continue to assist in conjunction with the Comprehensive Planning Division, the Zoning Commission, in studies leading to rezoning those areas in the District of Columbia which presently are not zoned in conformance with the Comprehensive Plan for the National Capital.

During FY 1974 considerable additional zoning referrals from the District were reviewed and Commission testimony was prepared and given in several major zoning cases in the city. These included Mt. Vernon Square East, the Georgetown Waterfront and several Zoning Regulation text and map amendments.

B. Historic Preservation

The enactment of the Historic Preservation Act of 1966 and the promulgation of Executive Order 11593, "The Protection and Enhancement of the Cultural Environment" has and will require additional staff effort by the Commission in order to properly carry out increased responsibilities for historic preservation in the National Capital. This effort can be encouraged and increased by formally staffing the Historic Preservation Office and by carrying out the following necessary program activities during Fiscal Year 1975.

1. Advise and assist the Executive Director of the Commission and the D. C. Historic Preservation Officer during their deliberations concerning the effects of Federally assisted undertakings on landmarks listed in, or to be nominated to, the National Register of Historic Places following procedures recently established for complying with Sec. 106 of the National Historic Preservation Act of 1966 (P. L. 89-665). Section 106 cases in the District of Columbia will be particularly numerous, because of the enormous Federal interest in the city. This activity, already initiated, will increase substantially as additional landmarks are added to the National Register.

2. Provide staff support for the Joint Committee on Landmarks to assist them in their responsibilities for designating landmarks and advising the Committee's three parent bodies on preservation programming and landmark protection. An increase in support for the Committee will be required if the draft regulation for landmark demolition delays is approved in Fiscal Year 1974.

3. Coordinate the activities and provide advice on individual preservation projects such as the Adas Israel Synogogue, Eastern Market, Logan Circle, the Old D. C. Public Library and Franklin School. This is an expanding activity brought about by the yearly increases in preservation project grant lands.

In order to carry out the expanded program activities it is proposed to reassign certain current personnel into a Historic Preservation Office. This would include a Chief of the Office of Historic Preservation, currently the Landmarks Coordinator on part-time assignment from the Regional Affairs Division, and an Assistant Chief, currently the Writer-Editor in the Office of the Director, Long Range Planning and Regional Affairs. In addition, a clerk-steno would be assigned to this division.

C. Comprehensive Planning Division

During Fiscal Year 1975 this division will continue both its planning initiating function and the review and supporting function on specific projects.

1. In its initiating function it will continue the preparation and detailing of proposed policy covering selected elements of the Comprehensive Plan for the National Capital including initiation of a new series of city-section studies leading to the detailing of plan objectives throughout the city, with the Federal Employment Area being suggested for priority attention.

2. In articulating regional development objectives corresponding and relating to policies of the Comprehensive Plan for the National Capital including the city and the Federal establishment within the National Capital Region.

3. In conjunction with the Division's supporting and referral function, innovative studies will be undertaken, such as the completion of the New York Avenue Corridor, the refinement of basic urban design concepts for the entire city, and the Federal development program for the National Capital Region. In addition, this Division will continue to participate in the Metropolitan Washington Council of Governments' Year 2000 policies reappraisal as a continuing function as well as reviewing and assisting the District Planning Division in the city's public works and Capital Improvement Program.

D. Regional Affairs Division

The major function and continuing programs to be undertaken by this Division are as follows:

1. Assist the Metropolitan Washington Council of Governments in its review of the regional development form and policy guidelines for future growth as it relates to Federal interests in the Region.

2. Assist the Transportation Planning Board of COG in its program to develop a transportation plan for the National Capital Region, particularly, as it relates to access to Federal facilities in the Region.

3. Coordinate the review of COG's annual reports on: Housing--Policies and Programs, Open Space--Plan and Program, and Water and Sewage--Plan and Programs and the Regional Land Use Elements with the Federal agencies in the National Capital Region.

4. Expedite the staff's review of the Metropolitan Clearinghouse A-95 projects.

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5. Work closely with the suburban jurisdictions in the regional review of Federal master development plans and projects, as required by the Planning Act.

The program emphasis for Fiscal Year 1975 will be to identify the Federal interests in the region and to more closely monitor the implication of local plans with those of the Federal programs in the National Capital Region. There is currently no Federal clearinghouse in which Federal programs and activities are related to specific local planning programs and building activities. It is proposed that with the additional staff requested, overall assessment can be made for the National Capital Region, which will identify the compatibility of Federal planning activities with local planning activities and provide an early warning system where conflict may exist.

E. Socio-Economic Research Division

This Division has as its continuing responsibility the following:

1. Carrying out a program of economic and social studies of the Commission.

2. Data collection and analyses of various types.

3. Liaison and participation in research with other Federal and local public agencies and/or private research organizations.

During Fiscal Year 1974 increasing requests for undertaking real estate market analyses were made. These requests dealt with such areas as the housing market in the Friendship Heights, South Capitol-Buzzard Point areas and the Georgetown Waterfront area. Because of the development proposals and community reaction to developer interest throughout the city, it is essential that the Commission's Research Division have some capability of testing building markets such as housing and/or office demand in various sections of the city. To make policy recommendations without basing these recommendations on current market conditions is a weakness in the decision-making process of the Commission.

Research activities proposed for Fiscal Year 1975 include two functions. The initiation of basic research and the support research activities upon request within the staff or other public agencies. Specific initiation of research activities will include the Federal indicator role or presence in the city and the National Capital Region. In addition, housing and office market studies would be undertaken in specific sections of the city undergoing change. The commercial area studies undertaken in Fiscal Year 1974 will be completed.

Support activities of this Division will include continuous up-dating of Federal employment data, data requested by other public agencies such as the Architect of the Capitol in relation to studies of Capitol Hill and employment and population projections as they relate to the Metropolitan Washington Council of Government's continuing planning process.

F. Office of Area Design

The principal function and responsibility of this Office include:

1. Basic design advice and consultation with all Commission divisions.

2. Preparation of selected area-wide design studies and/or plans.

3. Design review, evaluation and supervision as requested of studies and design proposals undertaken by other public agencies and their consultants.

This Office will complete design work previously specified in its work program for Fiscal Year 1974, including the New York Avenue Industrial Corridor design and the Riggs Road Uptown Center proposals.

The proposed Fiscal Year 1975 work program includes:

1. A design study of the Federal Employment Area from the White House west terminating in the "West End Precinct" as a generator of new urban form. This work when combined with the design work on the eastern portion of the Central Employment Area being done in Fiscal Year 1974 will cover the entire central urban core of L'Enfant City from Rock Creek to Union Station.

2. Select components of city-wide design structure:

   a. Kenilworth Avenue Corridor

   b. South Capitol-Anacostia/Bolling Corridor

   c. North Central Corridor

G. Cartographic Services Office

This office performs all of the graphic, drafting and illustrative work for each of the divisions and offices of the Commission. During Fiscal Year 1974 the drafting workload has continued to grow substantially particularly in the mapping of federal employment data and historic preservation. The office is now composed of five cartographic technicians.

During Fiscal Years 1973 and 1974, numerous agency task forces were organized to prepare detailed plans for various sections of the city, each of which required substantial map preparation and cartographic work. It is anticipated that task forces will continue to require additional drafting services in Fiscal Year 1975.

H. Library Office

This office provides readily accessible reference material on urban planning development to National Capital Planning Commission staff and Commission members as well. The library includes not only material pertinent to the Washington, D. C. area, but other locations across the country.

III. Current Planning and Programming

Current Planning and Programming activities of the Commission are carried out by the District Planning, Federal Planning, and Urban Renewal and Housing Divisions, the Transportation Planning and Environmental Affairs Offices, and the Special Assistant for Bicentennial Planning.

The Director of Current Planning and Programming is responsible for the general direction and supervision of the divisions and offices described below:

A. District Planning Division

This Division carries out a major part of the Commission's planning role with respect to the District of Columbia Government:

1. Fiscal Year Capital Budget Estimates

Working with the District Government, the Division reviews the annual budget requests of individual District agencies and departments. Each of the projects requires an examination of its conformance with the Comprehensive Plan.

During Fiscal Year 1973, 94 individual project budget requests by District of Columbia departments and agencies were reviewed for the District's Fiscal Year 1974 Capital Budget as part of the Fiscal Year 1974-1979 Six-Year Capital Improvements Program.

2. Six-Year Public Works Program for the District of Columbia

Section 7 of the Planning Act provides that "the Commission shall recommend a six-year program of public works projects which it shall review annually with the agencies concerned."

The six-year public works program is one of the principal tools for coordinating current proposals and relating them in a priority system to a program for carrying out the Comprehensive Plan. At the request of the District Government, the Commission's staff works directly with the Executive Office of the Commissioner in preparing this program.

On October 6, 197%, the Commission's Executive Committee, on behalf of the Commission, approved and forwarded to the District Government recommendations on the District's Fiscal Year 1974-1979 Six-Year Capital Improvements Program which contained 334 individual projects.

3. Current District Land Acquisition and Construction Projects

Pursuant to Section 5 of the Planning Act, the Commission reviews the proposed general location, site boundaries, and preliminary and final site and building plans for individual District projects within the National Capital Region, in accordance with a three-step procedure established with the District. Each proposal is reviewed for consistency with the Comprehensive Plan.

In Fiscal Year 1973, the Division reviewed and made recommendations on the siting of three projects and on the site and building plans for 43 projects. The staff continued to devote considerable time to the review of the environmental aspects and implications of District Government projects. The Division reviewed and evaluated the environmental impact of 28 projects in the final stage and 15 projects in preliminary design stages.

4. Master Plan for Major District Installations

The District has a number of large tracts of land, both in the city and in the region, which it uses for various facilities and special installations. Significant capital investment is required for the maintenance, improvement, and expansion of these facilities. These sites include the Municipal Center, D. C. General Hospital, the Blue Plains Water Pollution Control Plant, D. C. Village, the Lorton Correctional Complex, and Glen Dale Hospital. Master Plans should be prepared and/or updated for each of these major facilities by the responsible District agencies according to agreed-upon submission criteria. These plans need to be coordinated with the Comprehensive Plan for the National Capital and plans of the various jurisdictions outside the District.

In addition, the Commission reviewed and approved a preliminary master plan for the permanent Downtown Campus of Federal City College during Fiscal Year 1973, and is continuing its coordination with the Washington Technical Institute at Connecticut Avenue and Van Ness Street, N. W., in accordance with the master plan approved by the Commission in the previous fiscal year.

During Fiscal Year 1974 the Commission will work closely with the District Government in the preparation of a master plan for the D. C. General Hospital Complex and the grounds of the adjacent old D. C. Jail, which is soon to be replaced by a new Correctional Detention Facility. This master plan will be an important aid to guide the development of this large tract of District land.

5. District Employment Plans and Programs

A long-range District employment plan and program is needed for all District facilities in the Region. The plan should be related to Federal employment plans within the framework of the Comprehensive Plan and to metropolitan employment plans of the Metropolitan Washington Council of Governments. The Division will continue to work with the District of Columbia Government in efforts leading toward the preparation of this plan and program.

6. Other District Planning Division Functions

a. Street and Alley Closings

In accordance with D. C. Code, sec. 7-401, the Commission makes recommendations to the District Government on all proposed street and alley closings. During Fiscal Year 1973, 35 proposed closings were acted upon by the Commission.

b. Permanent System of Highways Plan

Commission approval is required for all changes in the Permanent System of Highways Plan. No changes to the Permanent System of Highways Plan were reviewed in Fiscal Year 1973.

c. Transfers of Jurisdiction

Pursuant to D. C. Code, sec. 8-115, the Commission approves all transfers, among and between Federal and District authorities, of jurisdiction over properties owned by the United States or by the District of Columbia within the District. The Commission acted upon 491 transfers of jurisdiction during Fiscal Year 1973. The major portion of these transfers involved land transferred from the National Park Service to the District of Columbia Government for recreation and related purposes, in accordance with the Parks and Recreation Facilities Chapter of the Comprehensive Plan for the National Capital.

d. Sales of Surplus District Land

Pursuant to D. C. Code, sec. 9-301, the Commission approves all sales of District-owned land which the District Government and the Commission find to be no longer required for public purposes. One proposed sale of surplus District land was reviewed by the Commission in Fiscal Year 1973.

e. Beautification Program

Under the provisions of Section 5 of the National Capital Planning Act of 1952, as amended, and HUD's requirements for Federal financial assistance, the Commission has, in past years, reviewed and approved Fiscal Year Beautification Programs for the District of Columbia. Because of a moratorium on this program the District Government did not prepare a FY 74 Beautification Program.

f. Service Area System

During Fiscal Year 1970, the Mayor-Commissioner authorized the city to be subdivided into nine service areas in order to improve planning and programming activities, interagency coordination and citizen participation. The Commission staff participates in the Community Services Advisory Committee and the service area committees which implement this system. The staff provides technical support to the nine area committees in regard to project plans. In Fiscal Year 1973, the Commission's staff continued to work closely with the District Government in improving the service area system as an important channel of communications for coordination with the community in preparing capital programs and reviewing individual project proposals.

B. Federal Planning Division

This Division is responsible for projects and developments of the Executive Branch Departments and independent agencies in the Region, including:

1. Fiscal Year Capital Budget Estimates

Pursuant to Section 7 of the Planning Act and Section 11.5 of Office of Management and Budget Circular A-11, the Commission reviews fiscal year budget requests of Federal agencies for land acquisition and construction projects in the Region for consistency with the Comprehensive Plan for the National Capital, master plans for individual Federal installations, and other District and Federal projects, and regional and subregional plans for the Region.

In Fiscal Year 1973, the Commission reviewed the budget requests of 12 Federal agencies. Commission recommendations are forwarded to the sponsoring agency and the Office of Management and Budget.

2. Six-Year Public Works Program

Section 7 of the Planning Act provides that "the Commission shall recommend a six-year program of public works projects which it shall review annually with the agencies concerned."

In the past, the Commission reviewed and made recommendations on the five-year military construction programs proposed by the Departments of the Air Force, Army and Navy in the National Capital Region. However, since a comprehensive study of the future utilization of military installations in the National Capital Region was being conducted by DOD during Fiscal Years 1971, 1972, and 1973, Five-Year Military Construction Programs were not submitted.

This study was initially submitted for Commission review in December 1971, with an updated appendix submitted in March 1973.

The first phase of the program to accomplish this plan has yet to be developed and submitted for Commission review.

The initial phase will constitute the majority of the five-year military construction program for the 1974-1978 period.

Ultimately, the Commission anticipates that it will prepare and recommend a Five-Year Public Works Program for all civilian and military land acquisition and construction projects proposed in the Region. Such a program would be a major tool in coordinating and guiding the implementation of long-range Federal employment plans and programs in the Region and, in conjunction with the District's Six-Year Public Improvements Program, would become part of the regionwide program proposed by the Metropolitan Washington Council of Governments.

3. General Location and Site and Building Plans

Pursuant to Section 5 of the Planning Act, the Commission reviews proposed land acquisitions and building sites and both preliminary and final site and building plans.

In Fiscal Year 1973, the Commission reviewed a total of ninety-three projects, including renovations to the Tomb of the Unknowns at Arlington National Cemetery, the Frederick Douglass Home National Memorial Visitor Center, and the Federal Republic of Germany Air Cargo Building at Dulles Airport.

The 93 general location and site and building plans projects reviewed in Fiscal Year 1973 is an increase of 23 from the 70 projects of this type reviewed in Fiscal Year 1972.

4. Master Plans for Major Federal Installations

Fourteen master plans, one modification and four subarea plans were reviewed and approved by the Commission during Fiscal Year 1972. In FY 1973, three master plans, seven revised master plans, three modifications to master plans, and three subarea plans were reviewed.

As the number of Federal installations with a master plan increases the Commission becomes more involved in reviewing revisions to previously approved plans intitiated by changes in an agency's program.

5. Park, Parkway and Playground System

During Fiscal Year 1973, four projects were submitted and approved by the Commission.

6. Review of Local Jurisdiction Plans for Impact on Federal Development in the National Capital Region

In Fiscal Year 1973, the Division reviewed a proposed Comprehensive Plan for Alexandria, Virginia, a preliminary Comprehensive amendment to the Germantown Master Plan and the Metropolitan Washington Council of Government's Housing Policies and Program for Metropolitan Washington, 1971.

7. Long-range Federal Employment Plan and Program

The Division, in conjunction with the Comprehensive Planning Division, is developing a long-range plan and program for Federal employment in the Region. The policy and program recommendations resulting from this study will be a part of the Commission's Proposed Comprehensive Plan for the National Capital. In Fiscal Year 1973, the Division began updating to a 1971-1991 time frame employment data for Federal agencies in the Region for use as a basis for developing employment forecasts and the Federal employment plan and program elements of the Comprehensive Plan.

The Commission's Federal employment studies and the Federal Employment Plan and Program for the National Capital Region should be kept current, updated and extended on a systematic basis in keeping with day-to-day decisions and developments in the National Capital Region. The Metropolitan Washington Council of Governments is currently undertaking a regional employment study. Extensive liaison and consultation between the Commission and the Council about these studies and, particularly, on Federal employment policies as they relate to, and support, regional policies and programs will be required.

8. Analysis and Evaluation of the Environmental Impact of Federal Projects in the National Capital Region

In Fiscal Year 1973, the Division, in conjunction with the Environmental Office, reviewed the environmental aspects and the descriptions for Federal projects and advised and consulted with Federal agencies environmental statements for submission to the Council on Environmental Quality.

9. Analysis and Evaluation of the Housing Implication of Federal Employment Changes in the National Capital Region

The Division has been assembling and analyzing data submitted by Federal agencies regarding employment and housing and a consultant's report has been prepared to assist the Commission in preparing its policy on this matter. The Division also has under review Appendix 2, "Regional Housing Study" of a Plan for Department of Defense Facilities in the National Capital Region which will clarify the military's impact on the housing market in general and specifically on "low" and/or "moderate-income" housing. This report coupled with data from other agencies will provide a basis for Commission policy.

It is anticipated that the staff will develop, and the Commission will adopt, modified policies and procedures in Fiscal Year 1974 in order to make its housing impact policies and procedures more definitive and useful as a guide to Federal agencies in the National Capital Region.

10. Excess Federal Land Surveys and Site Studies

In accordance with Executive Order 11508, providing for the identification of unneeded Federal real property, the General Services Administration has initiated a series of surveys in the National Capital Region.

C. Urban Renewal and Housing Division

In accordance with the District of Columbia Redevelopment Act of 1945, as amended, the Division prepares urban renewal plans and modifications thereto for adoption by the Commission and approval by the District of Columbia Council.

1. Neighborhood Development Program Activities

In Fiscal Year 1973, the Commission adopted additional modifications to the urban renewal plans for the Shaw School, Downtown, H Street, and 14th Street Urban Renewal Areas in conjunction with Fourth Year Action Program. This work was funded under an agreement with the Redevelopment Land Agency in the amount of $140,000 for Fiscal Year 1973.

2. Other Urban Renewal Projects

In addition to the above-described NDP-type projects, the District of Columbia has several other urban renewal projects which involve the Commission, as follows:

a. Fort Lincoln

The Commission adopted the Urban Renewal Plan for the Fort Lincoln Urban Renewal Area on May 19, 1972, and it was approved by the District Council on July 26, 1972. Fiscal Year 1973 activities included designation of boundaries and transfer of a site for an elementary school. Also, the developer began detailed survey and plans for development of the major circulation system, and open space and establishment of a management system for the project.

b. Southwest

During Fiscal Year 1973 a modification to the Urban Renewal Plan was adopted by the Commission and approved by the Council, which added the Metro transit line and stations to the Plan. Also, a modification to the Plan was adopted by the Commission revising the Land Use Plan designation for Parcel 76 from Semi-Public (Church) to Residential with related plan controls.

c. Northwest No. 1

During Fiscal Year 1973, four modifications to the Plan were adopted by the Commission and approved by the Council. A modification referring to retention of New Jersey Avenue was adopted by the Commission but not acted upon by the Council.

During Fiscal Year 1974, it is anticipated that work will be needed on the unresolved New Jersey Avenue issue and other questions that may emerge regarding the proposed Center-Leg Freeway and air-rights development.

d. Northeast No. 1

During Fiscal Year 1973, Plan modifications were adopted by the Commission and approved by the Council including 1) the proposed H Street overpass to serve the National Visitor Center Garage and the related inter-city bus terminal and 2) expansion of the permitted uses in the Industrial-Commercial use category. During Fiscal Year 1974, the proposed expansion of the main D. C. Post Office may require consideration of possible plan changes.

e. Anacostia-Bolling

In 1973, the Department of Defense submitted its proposed Development Concepts for the Bolling/Anacostia Tract, which included the entire Anacostia-Bolling Urban Renewal Area. It also submitted a Preliminary Master Plan for the Central Area, and a Revised Master Plan for the Naval Research Laboratory.

Because of the unresolved question regarding the most appropriate future use of the urban renewal area, the Commission, at its meeting on May 31, 1973, postponed, until repeal of Section 607(b) of Public Law 89-188, as amended, or until adjournment of the 93rd Congress, whichever shall occur first, consideration of development concepts, master plan, or modifications thereof, and site and building plans for the portion of the Bolling/Anacostia Tract within the proposed modified boundaries for the Anacostia-Bolling Urban Renewal Area set forth in the draft Urban Renewal Plan dated June 1, 1967. However, the Commission approved the preliminary Master Plan for that portion of the Central Area which lies outside the boundaries of the 1967 draft Urban Renewal Plan and approved the revised Master Plan for the Naval Research Laboratory.

It is anticipated that in FY 1974, the Commission will be involved in further efforts to establish the most appropriate reuse of the Anacostia-Bolling Urban Renewal Area.

f. Other

The Department of Licenses and Inspections of the District of Columbia is currently implementing a Federally-Assisted Code Enforcement (FACE) project in the Trinidad Section of the District and has made application to the Department of Housing and Urban Development for funds to carry out a FACE project in Southeast Washington. The Commission is involved in such projects to the extent of approving boundaries and maintaining, through its staff, a close relationship with the Department in its progress on such projects.

In addition, the Urban Renewal Division is involved, on a continuing basis, with proposals for new urban renewal proposals both in and out of existing urban renewal projects and works closely with the District of Columbia Model Cities Commission and the Service Area Committees which are geographically related to existing urban renewal areas.

3. Public Housing

In cooperation with the National Capital Housing Authority, a variety of housing proposals were studied in Fiscal Year 1973. The Commission approved (1) the purchase of 160 units of scattered housing to accommodate large-size, low-income families and (2) the final site and building plans for 146 housing units to accommodate large-size, low-income families.

D. Office of Transportation Planning

The major responsibilities of this office are as follows:

1. Review of plans for transportation facilities, such as transit stations, freeway and street improvements, and parking facilities which are submitted for Commission review under Section 5 of the National Capital Planning Act of 1952.

2. Technical assistance to the District,Federal, and Urban Renewal and Housing Divisions on the Transportation elements of master plans, capital improvement programs or construction projects.

3. Preparation and analysis of modifications to the Mass Transportation and Major Thoroughfare Plan elements of the Comprehensive Plan in cooperation with the Comprehensive Planning Division and in liaison with the Transportation Planning Board of the Metropolitan Washington Council of Governments.

4. Liaison on behalf of all divisions on matters concerning transportation and traffic with the Washington Metropolitan Area Transit Authority, the District of Columbia Government, the Transportation Planning Board, and other local and subregional organizations within the Region.

In Fiscal Year 1973, the Commission's transportation planning activities included the following:

1. Rapid Rail Transit System

In FY 1973, the Commission reviewed and made recommendations to the Washington Metropolitan Area Transit Authority on the preliminary designs of eight, and the final designs of two, Metro stations. All of these stations were located within the District of Columbia.

In addition to its review of the Authority's station plans, the Commission reviewed plans for Metro facilities involving three alignments with one of these alignments going through Federal lands. One of the alignments necessitated a modification of the Mass Transportation Plan. The Commission also reviewed and approved the final design and alignment for the L'Enfant-Pentagon River Crossing.

As of August 7, 1973, the status of Commission review of Metro Stations in the District of Columbia was as follows:

State of Review	Number of Platforms: Approved to date	To be reviewed	Total
Preliminary Plans (platform location and general means of access	41(1)	3	44
Final Plans (final designs for stations and access)	20(2)	24	44
Totals	61	27	88

(1) Includes FIVE stations which were reviewed with approval deferred and recommendations made.

(2) Includes TWO stations which were reviewed with approval deferred and recommendations made.

In addition to the above, the Commission also reviews plans for Metro facilities in the Maryland and Virginia portions of the National Capital Region that directly or indirectly affect Federal land or interests.

STAGE OF REVIEW	APPROVED TO DATE	TO BE REVIEWED	TOTAL
1. Alignments			
a. Preliminary plans	3	6	9
b. Final plans	0	9	9
2. Stations			
a. Preliminary plans (platform location and general means of access)	3	2	5
b. Final plans (final designs for stations and access)	1	4	5
TOTALS	7	21	28

In FY 1973, the Commission reviewed the plans for two Metro route alignments outside of the District of Columbia.

In Fiscal Year 1975, it is anticipated that the Commission's reviews of the Authority's plans will continue with emphasis on the final designs for Metro facilities proposed in the District of Columbia and preliminary and final plans for Metro facilities affecting Federal installations in the Maryland and Virginia portions of the National Capital Region.

2. Streets and Highways

In Fiscal Year 1973, the Commission did review and comment on one highway design plan for the District of Columbia Department of Highways and Traffic, as well as two draft environmental statements on freeways within the District of Columbia.

In addition to highway review within the District of Columbia, the Commission reviewed and made recommendations on the design and use of exclusive bus ramps to the Dulles International Airport-Access Highway.

In FY 1975, it is anticipated that the Commission will continue its review of proposed street and highway proposals, including freeways, within the District of Columbia.

3. Technical Advice and Assistance

In FY 1973, this office provided technical advice and assistance to the Commission and to the various divisions and offices.

4. Modifications to the Comprehensive Plan

In Fiscal Year 1973, the Commission adopted two modifications to the Major Thoroughfare Plan and four modifications to the Mass Transportation Plan elements of the Comprehensive Plan for the National Capital.

5. Liaison and Coordination

In FY 1973, this office continued to participate in the work of the Transportation Planning Board of the Metropolitan Washington Council of Governments which will be completing a regional transportation plan, as

well as developing other shorter range plans. These include participation in the Short Range Transit Improvement Program and the South Capitol Street Urban Corridor project.

In FY 1974 and 1975, it is anticipated that these liaison and coordination activities will continue with emphasis on the regional transportation plan and Federal interests in the National Capital Region.

E. Office of Environmental Affairs

This office is responsible for the following activities:

1. Liaison and coordination with the Council on Environmental Quality (CEQ), the Environmental Protection Agency, and other agencies in the National Capital Region that have jurisdiction by law or special expertise on environmental matters, as identified and updated in the revised Council on Environmental Quality Guidelines of August 1, 1973.

2. Technical assistance and support to the Commission staff in the review and evaluation of proposed District of Columbia and Federal developments in the National Capital Region and proposed actions relative to the Comprehensive Plan for the National Capital and urban renewal plans in the District of Columbia.

3. Assistance, as requested, to agencies preparing documentation for submittal to the Commission in terms of explaining or interpreting the Commission policies, procedures, and/or criteria for submission as they relate to the environmental impact of proposed master plans, development programs or project proposals.

4. Assistance to the Commission staff in the preparation of environmental statements when such statements are required of the Commission under Section 102(2)(C) of the National Environmental Policy Act of 1969, and assistance to other Federal agencies in the preparation of joint environmental statements when necessary.

5. Development of amendments to the Commission's Environmental Policies and Procedures in order to improve their effectiveness within the National Capital Region and to reflect revisions of the Council on Environmental Quality's Guidelines for the Preparation of Environmental Impact Statements.

From the adoption of the Policies and Procedures on August 6, 1970, to the end of FY 73, the Commission has made (1) a total of 51 environmental reviews and findings on actions initiated by the Commission, and (2) a total of 378 environmental reviews including 148 environmental findings, on developments in the National Capital Region proposed by District of Columbia Government, Federal agencies, the National Capital Housing Authority, and the Washington Metropolitan Area Transit Authority.

Under Appendix II of the Council on Environmental Quality's Guidelines, the Commission is recognized as a Federal agency with special interests in the National Capital Region that should be consulted by other Federal agencies preparing Section 102(2)(C) Environmental Statements on proposed developments in this area. Through FY 73, the Office of Environmental Affairs has reviewed and commented on 24 Draft Environmental Statements and three Final Environmental Statements.

In FY 73, six Draft Environmental Statements and one Final Environmental Statement were prepared pursuant to Section 102(2)(C) of NEPA.

An eleventh EIS, the Draft Environmental Statement for the Dwight D. Eisenhower Memorial Bicentennial Civic Center and Related Modifications to the Comprehensive Plan for the National Capital, was under preparation at the close of FY 73, and has been circulated for review and comment in FY 74.

In order to insure continued consistency with the revisions of CEQ Guidelines for the Preparation of Environmental Impact Statements, the Commission's Environmental Policies and Procedures must be periodically reviewed and updated. Since their adoption by the Commission on August 6, 1970, ten amendments have been made to the Environmental Policies and Procedures. Five of these modifications were made in FY 73. In view of the August 1, 1973 revisions to the CEQ Guidelines, the development and adoption of additional amendments will be necessary in the future.

F. 1976 Bicentennial Planning

The Commission provides technical planning assistance and support to official bicentennial planning and programming agencies in the National Capital Region. More specifically, this involves liaison and coordination with:

1. The District of Columbia Government, the D. C. Bicentennial Commission and Assembly.

2. The Federal Bicentennial Coordination Center established in the General Services Administration by the President.

3. The various Federal agencies as a part of the planning proposed developments for the Bicentennial celebration.

In Fiscal Year 1973, the Commission has:

1. Prepared an analysis and summary of the status of NCPC's planning review of all Federal Bicentennial proposals involving land acquisition or construction in the Region. This summary is being kept upt-to-date in order to monitor the status of all such planning reviews.

2. Participated, through the D. C. Office of Bicentennial Coordinator, in a detailed analysis of a package of D. C. Bicentennial projects developed by the Mayor's Committee on Community Development. This also involved technical assistance in presentations to other Bicentennial related organizations so they could effectively review and comment on the evolving D. C. Bicentennial program.

3. Reviewed and acted upon seven preliminary plans and eight final plans for proposed Federal development proposals that are to be a part of the bicentennial celebration in 1976.

In Fiscal Year 1975, it is anticipated that the Commission will substantially complete its activities associated with the review of proposed construction projects to be completed by 1976. The Commission will continue to provide technical advice and assistance to the official District of Columbia and Federal bicentennial planning and programming agencies during the fiscal year

In addition, the Commission will be preparing its own program of activities, including an exhibit on the history of the planning and development of the Nation's Capital, for the Bicentennial celebration in 1976, which is also the 50th anniversary of a comprehensive planning agency in the city of Washington.

IV. Services of Experts and Consultants

A. Fiscal Year 1973 (funds available, $35,000; Obligated, $32,408)

Frederick Gutheim, Washington, D. C. $20,450
Additional work on "A History of Planning for the Nation's Capital. (Contract is for $39,950 of which $17,500 was FY 1972, $20,450 was FY 1973 and $2,000 is FY 1974)

Eugene Aiken Shaw, Washington, D. C. ..... $ 6,500
Economic Feasibility Study, Friendship Heights Area, District of Columbia

Wallace, McHarg, Roberts and Todd, Washington, D. C. 5,458
Testimony and related preparation for Zoning Commission Case No. 72-5

Alster & Associates, Inc., Washington, D. C. 25,000
Topographic mapping of Washington, D. C. (Note: contract was for $27,500 of which $25,000 from NCPC funds and $2,500 by reimbursement from Interior, National Park Service) Funds for this contract were those provided in the budget for 1976 Bicentennial Planning.

B. Fiscal Year 1974 (funds available, $35,000)

Real Estate Research Corp., Washington, D. C. 3,000
An addition to a $5,000 original contract in Fiscal Year 1972 for materials for a methodology to estimate supportable floor space and other features of retail trade and services in the District of Columbia.

Frederick Gutheim, Washington, D. C. 2,000
Final phase of work on "A History of Planning for the Nation's Capital" of the $39,950 contract mentioned under heading "Fiscal Year 1973" above

Ross, Hardies, O'Keefe, Babcock & Parsons, Chicago, Illinois..... 1,897
Review of proposed Georgetown Waterfront zoning regulations.

Additional consultant servaces to support Commission staff on special projects and programs needing outside expertise 28,103

In addition, $32,000 is available for the 1976 Bicentennial Planning 32,000

C. Fiscal Year 1975 (total requested $65,000)

Normal consultant services to support Commission staff on special projects and programs needing outside expertise 35,000

Special technical consulting se ces and assistance in the development of data and information to be incorporated into Environmental Impact Statements to be prepared by the Commission 15,000

To secure expert consulting services to establish a system for recording, monitoring and projecting Federal Employment changes in the National Capital Region 15,000

V. Publications Program

A sum of $53,623 was provided for this program in FY 1973 and again the same amount for FY 1974.

The funds available for Fiscal Years 1974 and 1975 will be used to finance the publication of a summary of Commission policies, programs and activities on a quarterly basis for use by the Commission members and staff as well as other interested professionals and technicians. Additional chapters of the "Comprehensive Plan for the National Capital" will be published. The funds will also be used to finance the publication of staff information series reports and a variety of special reports on topice such as the Georgetown Waterfront, Fort Lincoln, urban renewal studies, landmarks preservation, community development and urban design studies.

The summary report will be 9" x 11", containing an average of 32 pages which are composed of black and white line drawings and half-tones in addition to text. The staff information series and special reports will vary in size depending upon their content of text, maps, charts, photos or other materials, from 50 pages--such as the "Elements of the Comprehensive Plan for the National Capital"--to approximately 150 pages--such as the "Regional Development Guide," "Landmarks in the Downtown Urban Renewal Area" or "The Urban River, a Staff Proposal for Waterfront Development in the District of Columbia." Frequently, extra copies of these reports are reproduced for sale by the Superintendent of Documents.

The appropriation Land Acquisition, National Capital Park, Parkway and Playground System contains an unliquidated obligation of $48,000 under the activity Park, Parkway and Playground System in the District of Columbia for the Klingle Valley rights-in-land with respect to the Davies Estate (Tregaron). There also remains in this same account an unobligated balance of $805 for possible use for miscellaneous expenses.

There are no remaining funds in any of the other activities under the land acquisition appropriation and no additional funds are being requested.

Home Rule Legislation

The impact of recent Home Rule Legislation on the National Capital Planning Commission is difficult to gauge at this point. Preliminary indications are that additional responsibilities will accrue to the Commission in the coming fiscal year and continue in subsequent years. It may be necessary at a later date to have discussions on the ramifications of the Home Rule Legislation vis-a-vis the National Capital Planning Commission and possible increased staffing requirements.

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

INTRODUCTION

The National Foundation on the Arts and the Humanities was created by the Congress for a purpose both idealistic and practical. It seeks the full expression of the creative and intellectual energies possessed by the American people, on which the strength of our democracy depends. This budget for Fiscal Year 1975 builds on the record of a growing national response to the work of the Arts and Humanities Endowments, and defines the needs and the promise that attend this enterprise for the year ahead.

It is a tenet of the American heritage that every citizen may hope to realize his and her full potential, toward which some practice of the arts and use of humanistic knowledge is fundamental. More broadly, in the words of the Act establishing this Foundation, "a high civilization must...give full value and support to [those] branches of man's scholarly and cultural activity" which aim "to achieve a better understanding of the past, a better analysis of the present, and a better view of the future." The Foundation addresses both of these aspirations: fulfillment of the individual, and commitment to the wise ordering of society.

In America, as elsewhere, the force of tradition interacts with compelling new realities. Both must be appraised if we are to draw strength from the animating ideas on which the nation was founded, and to act with an equal vision in meeting the crises and opportunities of today and tomorrow. The Foundation has from its beginning supported creative work and professional study which proceeds rationally toward these ends. Now, the forthcoming Bicentennial inevitably intensifies this focus. The Administration and Congress, recognizing the integrity of the Foundation's approach, have charged it with ensuring that this very special occasion will be used for an intelligent nationwide exploration of American ideals and institutions -- their origins, their performance under stress, their viability in today's world.

The present budget, therefore, is designed to carry on the definitive mission of the Foundation while accommodating an emphasis on commemoration of the Bicentennial. Faithful to its mandate, the Foundation has helped to activate an ever-larger constituency of citizens who are contributing to--and drawing on--the nation's resources in the arts and humanities. The stimulus of Federal interest has energized much new support to the arts and humanities from state and local governments and from private sources. The budget for Fiscal Year 1975 is based on proofs of the Foundation's effectiveness. It provides for the maintenance and further development of well-defined and carefully monitored programs through which the arts and humanities may increasingly serve the public good and the national interest.

As required by Section 1311(b) of the Supplemental Appropriations Act, 1955, as amended (31 U.S.C. 200(b)), we are reporting that all statements of obligations furnished to the Office of Management and Budget in connection with the National Foundation on the Arts and the Humanities' requests for proposed appropriations for the Fiscal Year 1975 consist of valid obligations as defined in Section 1311(a) of that Act.

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NATIONAL ENDOWMENT FOR THE ARTS

SUMMARY STATEMENT FOR FISCAL YEAR 1975

The National Endowment for the Arts proposes a Fiscal Year 1975 program budget totalling $82,000,000 in Federal funds:

Definite Appropriation -	for national, state agency, regional programs (not less than 20% of definite appropriation to be used for state agency/regional)*	$ 72,000,000
Indefinite Appropriation -	to match donations to the Endowment (Treasury Fund)	10,000,000
	TOTAL FEDERAL PROGRAM FUNDS	$ 82,000,000
Donations to the Arts Endowment's Treasury Fund		10,000,000
	Total Program	$ 92,000,000

This budget is a tight, realistic projection of the activities and resources required to carry out the mandate of our authorizing legislation, as recently renewed and amended. This legislative mandate, in turn, reflects the recognition now broadly shared by public and private leaders and ordinary citizens that the arts are an important aspect of life in America. Important as a barometer of our culture; important as a field of professional attainment; important as a source of employment and income; important as a means for development of the creativity in which we take national pride; and, not least, important as a source of human joy and self-fulfillment.

Beyond recognizing the value of the arts, Congressional action demonstrates a national awareness that specific, practical steps are required to assure that this value is preserved, developed, and broadly shared among our people.

In this context of national policy, our FY 1975 budget provides for continuing development and operation of programs initiated on recommendation of the National Council on the Arts, to advance the three basic goals of the Endowment:

1) Availability of the Arts: to promote broad dissemination of cultural resources of the highest quality across the country;

   Seven basic types of programs form the backbone of Endowment efforts in pursuing this goal:

   - New Directions programs to encourage imaginative projects that bring people and the arts together in new settings or circumstances, with expanded benefits to both artists and the public;

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*Per new reauthorization legislation, P.L. 93-133, signed October 19, 1973.

- Touring, to bring high-quality performances and exhibitions to ever-wider areas of this country;

- High-quality arts programming in film, television and radio reaching into many homes and communities which have not been reached by other means;

- Artists in Residence programs, to place artists in schools and other institutions;

- Expansion Arts programs, to provide active arts participation for people in all walks of life -- including the young, the elderly and the disadvantaged -- in urban and rural communities;

- Accessibility and Awareness programs, to make the arts a more functional and integral part of everyday life in the community;

- Federal-State Partnership programs to strengthen the efforts of State and Regional Arts Agencies in bringing the arts to more people in more communities.

2) Cultural Resources Development: to assist our major cultural institutions to improve artistic and administrative standards and to provide greater public service;

The Endowment pursues this goal by providing essential assistance to specific, high-priority projects of individual museums, professional orchestras, theaters, dance, opera, chamber or choral groups, and to literary magazines and independent presses.

3) Advancement of our Cultural Legacy: to support creativity among our most gifted artists, encourage the preservation of our cultural heritage, and advance the quality of life of our nation;

Endowment assistance designed to achieve this goal is concerned primarily with:

- Creative Development through individual fellowships, commissioning, developmental theater, workshops in the visual arts and crafts, and professional training;

- Enhancement of America's indigenous arts, through assistance to crafts, folk arts, film-making as an art, a national center for American dance, and jazz/folk/ethnic music;

- Preservation of endangered national treasures, with current emphasis on museum collections, film, and architecture;

- Environmental preservation and enhancement through the widely-acclaimed City Options and Federal Design Programs;

- Flexible programming; research; and assistance to key national organizations which perform important services for broad professional and nonprofessional constituencies.

Our FY 1975 programs are almost entirely extensions of already-operating programs or logical outgrowths of pilot projects that have proven highly successful. At the same time, we are continuing careful exploration of new ways to meet urgent needs through research and pilot projects.

Rapidly rising demand for participation in these programs continues to outstrip the funds available by a wide and growing margin. Comparing applications with grants made (4 to 1) gives only an incomplete picture of the unmet demand, because guidelines are designed to limit the volume of requests as closely as possible to the reality of funds available.

The FY 1975 budget projections continue to reflect the National Council on the Arts' basic view of the Endowment, not as the primary patron of the arts, but as a catalyst, using proportionately small grants to direct national attention and response to major opportunities as well as problems, and generating increased support for the arts from many other sources -- private, state and local. While increased Endowment funding is essential in order to fulfill this leadership role, the Endowment's relative share of total support for the arts will not grow, if our demonstrated success in generating other new funding continues.

With strong encouragement from the National Council on the Arts, the Endowment is increasingly exercising leadership such as the Council's recent resolution on accessibility of the arts to the handicapped, which has drawn warm response from many quarters. In this area and in many others, such as the already-operating Federal Design Program, concerted effort by the Endowment's professional staff, working with other Federal, state and local agencies as well as private institutions, can focus a broad range of public and private resources on major needs which the Endowment could never tackle with its own limited funds. The potential impact of this type of activity is virtually incalculable. Taking on this added dimension to a greater degree represents a major Endowment thrust for FY 1975. It requires a relatively small Endowment investment of administrative funds to generate major program investments from other sources.

The Endowment and the Bicentennial

The Endowment is receiving a steadily growing volume of proposals for a wide range of bicentennial projects in all of our program areas. This mounting pressure from the field makes it clear that the Endowment's FY 1975 programming will include substantial involvement in the nation's bicentennial celebration. The link between Endowment programs and the bicentennial is entirely natural -- indeed inescapable. The bulk of our programs have long paralleled the thrusts now identified as bicentennial themes:

a) recognizing and preserving our cultural heritage;

b) celebrating creativity in American life today;

c) expanding cultural horizons for future generations.

Feeling this close identification with the essence of the bicentennial, the National Council and Endowment believe that we can best serve the true purposes of the bicentennial by following the basic policies and practices established under the Congressional charter for our program as a whole. Bicentennial project applications will be handled in the same professional manner as all other applications. They will be reviewed by the appropriate program staff, by an advisory panel of outside experts in the relevant program field, and by the National Council on the Arts. In this way, the Endowment will maintain its emphasis on the quality and long-term value of bicentennial as well as all other projects we support.

Beyond this rigorous approach to funding of individual projects, we have also established a special Bicentennial Committee under the aegis of the National Council on the Arts. The Committee, which consists of current and former Council members, plus members of our program advisory panels, state arts agency representatives, and other private citizens, will be an invaluable source of creative overall planning for Endowment initiatives and responses relating to the bicentennial.

Major Program Developments

In FY 1974, the Endowment has proceeded generally along the lines projected in our budget presentation last year. In a number of respects, of course, initial planning for the year has been altered to adjust to reduced appropriation levels. However, we have made substantial strides in strengthening the effectiveness of our programs generally, including substantial increases in the level of support to major cultural institutions, such as orchestras, opera companies, and professional theatres, and to state arts agencies. We are also moving into new areas on a selective basis. Specific accomplishments:

-- Establishing a major new emphasis on crafts, especially through individual fellowships and Artists-in-Schools.

-- Launching a newly-designed program of grants in the Jazz/Folk/Ethnic music field.

-- Expanding grants to encourage the use of visual arts in conjunction with the performing arts.

-- Initiating fellowships for Composers, Librettists and Translators.

-- Beginning a pilot program for Expansion Arts "Tour Events" through which the country can view the accomplishments of community-based arts groups.

-- Expanding professional theatre touring into areas without access to live theatre.

-- Providing special grants in a major new effort to strengthen Program Development activity of state and regional arts agencies.

-- Beginning the decentralization of responsibility for Dance Touring Program management to state and regional arts agencies.

-- Moving on a pilot basis to involve state arts agencies in Expansion Arts, Theatre, and Architecture and Environmental Arts projects.

During FY 1975, the $16.7 million increase for state, regional and national programs will be devoted to projects that are urgently required now to advance the three basic goals of the Endowment, with special focus on the role of the arts in the bicentennial. (Our FY 1975 agenda includes important items -- many bicentennial -- which we were forced to postpone because of the reduction in our FY 1974 budget request. Clearly, if they cannot be initiated in FY 1975, their role in the bicentennial will be lost.)

I. Availability of the Arts (Increases $9.1 million)

The National Council on the Arts considers this increase a minimum to permit us to:

-- Initiate a new Program of Special Projects for creative response to bicentennial, mobile arts, and other rapidly emerging needs that do not fall within established program lines.

-- Strengthen existing Expansion Arts projects, increase the opportunity for wider participation in this vital, community-based program, and move the "Tour Event" pilot to a full program level.

-- Raise "basic state agency grants" from $150,00 to $200,000 each; increase state agency grants for community councils; expand assistance for regional programming.

-- Increase the number of schools benefitting from the popular Artists-in-Schools program and expand the scope of the program to include folk arts.

-- Broaden the coverage of the Dance Touring Program to meet the growing community demand (due heavily to state agency involvement); and expand theatre touring beyond the pilot stage.

-- Substantially increase, mostly through the Treasury Fund, support for creative use of the media to bring the arts to millions of Americans.

II. Cultural Resources Development (Increases $1.5 million)

This increase will provide for:

-- Expanding assistance to special museum exhibitions, where bicentennial pressure is very heavy.

-- Increasing essential assistance to a larger number of Resident Professional Dance Companies throughout the country.

-- Beginning to move the small choral music program from the pilot stage toward a more effective level.

-- Continuing the gradual increase in support of professional theatres and theatre for youth.

-- Starting a long-overdue pilot program of assistance to chamber music groups -- a field which shows great potential for reaching modern audiences in a wide variety of settings.

III. Advancement of our Cultural Legacy (Increase $6.1 million)

This increase is urgently needed to:

-- Help orchestras and opera companies commission and perform new American music, particularly in connection with the bicentennial.

-- Provide for a major effort to preserve and enhance American folk arts and crafts; and broaden opportunities for participation in the already-established jazz/folk/ethnic music program.

-- Respond to at least part of the large unmet demand for individual fellowships, and grants under the "City Options" program.

-- Increase urgently needed assistance to museum renovation of facilities for conserving the works in their collections.

-- Intensify our pilot efforts to strengthen the training of professionals in the arts and arts administration.

-- Provide assistance to key professional service organizations; respond flexibly to special requirements in each program field; and strengthen research to be used by the Endowment and the arts constituency.

Program Development and Evaluation (Increase $636,750)

This increase is essential not only for critically-needed studies and evaluations, but also to fulfill urgent leadership responsibilities such as the Annual Federal Design Assembly.

Treasury Fund (Increase $3.5 million)

This increase in funds which are used only to match private donations will continue the Endowment's increasingly important efforts to engage the private sector more fully.

The benefits resulting from these priority actions will be far out of proportion to the relatively small increases in Federal funding, because each dollar invested by the Endowment attracts, on the average, $3-$4 from non-Federal sources. This multiplier effect explains the remarkably wide impact achieved on a national scale by one of the smallest agencies in the Federal Government.

Energy and the Arts

FY 1975 will be a crucial time of testing for the arts in America. Bicentennial plans throughout the country assume that museums, performing groups of all kinds, and creative artists in every field

will be available to help interpret and inspire our national scene as we reflect on the rich diversity of American experience over 200 years.

These rising expectations are coming just at the time when energy and related economic problems threaten serious curtailment of activity in many fields of Endowment concern.

One of the most serious problems will be the increased cost of fuel, especially for touring and basic operating costs such as lighting, heating, and air-conditioning. Fuel shortages and price increases may also affect attendance, thereby reducing earned income of performing groups and museums. The combination of such problems raises the prospect of curtailment or cancellation of tours and other planned programs, with deprivation to performers and the public alike.

The fuel problems of the individual creative artist parallel those of the institutions. Increased costs of propane, for example, are seriously affecting professional American potters, glass blowers, and other craftsmen, just at a time when the crafts are beginning to come into their own in the country.

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Taking into account the accelerating demand on Endowment programs, the economic pressures arising from energy problems, the proven multiplier effect of Endowment grants, and the exciting potentials for the role of the arts in the upcoming bicentennial, the National Council on the Arts believes the Endowment's FY 1975 budget represents an essential investment in the national well-being.

NATIONAL ENDOWMENT FOR THE ARTS

SUMMARY OF FUNDS AVAILABLE

	1973 Actual		1974 Estimate	1975 Request	Increase
Appropriation, Definite 1/	$34,700,000		$54,275,000	$72,000,000	$17,725,000
Appropriation, Indefinite	3,500,000		6,500,000	10,000,000	3,500,000
TOTAL APPROPRIATION		$38,200,000	60,775,000	82,000,000	21,225,000
Gifts and Donations		3,631,898	6,500,000	10,000,000	3,500,000
Transferred from Others		125,500	-0-	-0-	
Recovery of Prior Year Obligations		119,932	-0-	-0-	
Unobligated Balance Prior Year		3,208,853 2/	2,002,235 3/	-0-	
Total Available for Obligation		45,286,183	69,277,235	92,000,000	
Obligations	42,030,998		69,277,235	92,000,000	
Transfers to Humanities	35,000	42,065,998	-0-	-0-	
Unobligated Balance		$ 3,220,185 2/	$ -0-	$ -0-	

1/ According to new reauthorizing legislation, funds for state arts agencies (and regional groups) are included in Definite Appropriation.

2/ Includes $1,217,949.25 represented by equity received in ANTA Theatre and other assets. Additional carryover is primarily Gifts and Matching.

3/ Does not include $1,217,949.25 equity in assets which is not available for obligation. Additional carryover is primarily Gifts and Matching.

NATIONAL ENDOWMENT FOR THE ARTS

ANALYSIS BY OBJECTIVE

	FY 73 Actual	FY 74 Estimated	FY 75 Requested	Increase (Decrease)
1. Availability of the Arts	$17,627,408	$25,980,767	$35,115,000	$ 9,134,233
2. Cultural Resources Development	13,206,563	12,811,819	14,300,000	1,488,181
3. Advancement of our Cultural Legacy	10,271,340	14,047,786	20,125,000	6,077,214
4. Program Development and Evaluation	897,720	1,823,250	2,460,000	636,750
5. Miscellaneous	27,967	-	-	-
6. Gifts, Donations, and Matching Funds	1/	14,613,613 2/	20,000.000	5,386,387
TOTALS	$42,030,998	$69,277,235	$92,000,000	$22,722,765

1/ Gifts, donations, and matching funds have been distributed by objective.

2/ Includes funds carried over from Fiscal 1973.

FUNDING SUMMARY INDEX

	Actual 73	Estimate 74	Request 75	Increase	PAGE
I. AVAILABILITY OF THE ARTS					
A. New Directions	$ 1,364,718	$ 1,729,505	$ 2,975,000	$ 1,245,495	A-11
B. Touring	1,683,468	3,621,073	5,450,000	1,828,927	A-12
C. Media	710,860	1,349,937	1,350,000	63	A-13
D. Artists in Residence	2,744,465	3,096,290	3,800,000	703,710	A-14
E. Expansion Arts	2,121,935	3,121,391	4,075,000	953,609	A-15
F. Accessibility and Awareness	1,513,023	2,167,362	3,115,000	947,638	A-16
G. Federal-State Partnership	7,488,939	10,895,209	14,350,000	3,454,791	A-17
TOTAL	($17,627,408)	($25,980,767)	($35,115,000)	($ 9,134,233)	
II. CULTURAL RESOURCES DEVELOPMENT					
A. Museums	2,000,620	3,659,009	3,975,000	315,991	A-20
B. Music	8,293,053	5,517,300	6,200,000	682,700	A-21
C. Theatre	2,120,500	2,792,850	3,100,000	307,150	A-22
D. Dance	537,390	442,660	625,000	182,340	A-22
E. Literature	255,000	400,000	400,000	-0-	A-23
TOTAL	($13,206,563)	($12,811,819)	($14,300,000)	($ 1,488,181)	
III. ADVANCEMENT OF OUR CULTURAL LEGACY					
A. Creative Development	4,210,692	4,796,926	5,815,000	1,018,074	A-24
B. Enhancement of America's Indigenous Arts	1,779,239	2,578,719	3,665,000	1,086,281	A-25
C. Preservation	1,941,412	1,606,004	2,600,000	993,996	A-26
D. The Environment	919,339	1,776,521	2,550,000	773,479	A-28
E. General Programming, Research, Services	1,420,658	3,289,616	5,495,000	2,205,384	A-28
TOTAL	($10,271,340)	($14,047,786)	($20,125,000)	($ 6,077,214)	
Program Development and Evaluation	897,720	1,823,250	2,460,000	636,750	A-31
Miscellaneous	27,967	-	-	-	
Gifts, Donations, and Matching Funds	*	14,613,613**	20,000,000	5,386,387	A-32
GRAND TOTAL	$42,030,998	$69,277,235	$92,000,000	$22,722,765	

* Gifts, donations, and matching funds have been distributed by objective.
** Includes funds carried over from Fiscal 1973.

I. Availability of the Arts

Actual FY 73	Estimate FY 74	Estimate FY 75	Increase
$ 17,627,408	$ 25,980,767	$ 35,115,000	$ 9,134,233

The President stated on September 14, 1973 that "...art is not a luxury, but a necessity to which all our citizens can and should have access." In that statement the President was re-confirming his own views, was reflecting those of increasing numbers of leaders in the nation, and was reaffirming one of the fundamental principles on which Congress originally based the very existence of the National Endowment for the Arts. Perhaps most significantly, the President was expressing a view that in recent years has come to be shared by a very broad segment of the population. In part, this is because the very definition of "the arts" has changed radically in popular understanding over the past few years. In part, it is because the arts actually have become more available and are thus more meaningful to many more individuals. The bicentennial celebration, of course, will accelerate the already existing demand for the arts being made more available.

NEW DIRECTIONS.

$2,975,000 in definite appropriations will go toward encouragement of new directions in the arts, particularly through Special Projects. Treasury Fund monies will also be used.

Special Projects. Since its beginning years, the Endowment has used modest sums for "special projects" to encourage and respond to inventive ideas of making the arts more available.

Small amounts of money have been used to support projects of merit that did not fall logically within any of the "discipline" programs, e.g. dance, music, literature. Indeed, some of these small monies uncovered ideas or needs that were only barely surfacing, but once uncovered, were clearly major new directions in the future of the arts and the audiences they serve. As funds became available, new Endowment programs were established to encompass some of these -- Expansion Arts and Artists-in-Schools are the most obvious examples. Other monies were directed to special projects that suited a particular requirement, such as early support for the Michigan Artrain that subsequently was moved to the Rocky Mountain Region for a successful tour last summer, and, after six months in Michigan, will be moving out of state again, this time to the Southeast in April.

The National Council on the Arts, the Endowment's 26-member policy advisory body, has felt for some time that much greater encouragement must be given to valid new directions, and also to the growing trend toward cooperative programming between the various art forms and cultural institutions. One of the most obvious examples of cooperative efforts that has never received attention by the Endowment is the phenomenon of arts centers, large and small.

Therefore, on the Council's urging, the Endowment will establish in March 1974, a fully focussed program to encourage a

whole variety of new thrusts. It will be called "Special Projects."

The Council feels that this recognition of the importance of creative projects in reaching people is long overdue and has been recommending this step for over two years. Further, its discussions concerning the bicentennial needs of the country have reaffirmed that it is essential to begin the program now. The Council is hopeful that the increased funds requested will be granted by the Congress in order to make this an effective effort. A Special Projects office has been established separately in the Endowment; a panel is in the process of formation.

Special Summer Programs. Most assuredly, the new program just described does not imply that "new directions" to reach more people in meaningful ways will not be explored constantly in all program areas of the Endowment. For example, there are many special summer programs, including festival-type activities, supported by the Endowment, particularly in music and expansion arts. These projects often reach new audiences in less formal settings. A pilot of this sort for nonprofit professional theatres will begin in 1975.

Music Audience Development. Other examples include efforts to reach new audiences in music. To date, some support (through the Treasury Fund) has gone to enabling music groups to go into classrooms to engage young people's interest in all facets of music (through workshops rather than full performance). And another project has brought gifted young artists into factories, parks, hospitals, community centers--a whole raft of new settings for the arts. Response has been outstanding.

Indeed, all of the activities assisted in Availability of the Arts not only continue proven programs but are constantly exploring "new directions" or translating a proven concept in one discipline, to another. Nonetheless, the Council views the establishment of the Special Projects office and appropriate funding as one of its key priorities in Fiscal 1975.

TOURING.

Touring is a good example of the need to expand a proven program as well as to translate the experience in one discipline to others. The FY 1975 request for touring is $5.45 million.

Dance Touring. This program, begun in 1968 in two states, now reaches into every state in the union and continues to grow in response to demand. The program for the smaller dance companies involved 60 groups touring almost 250 weeks in 1974. Administration is being transferred substantially to the state and regional arts agencies beginning in Fiscal 1974, and will be handled by them almost entirely by the end of Fiscal 1975. The three larger companies are assisted also to tour nationally. The overall program generates between $4 and $5 from other sources to match one federal dollar. Also, touring of dance companies outside the Endowment's effort has increased significantly.

Theatre Touring. The Endowment is evaluating results of two pilot projects (which reached 11 states) in regional theatre touring, and is making planning grants to several theatres for future tours. In Fiscal 1975, it is anticipated that a touring program will be underway, bringing professional theatre activities (workshops as well as performances) to thousands of Americans currently without access to live theatre.

Expansion Arts Touring. In addition, the Endowment this year is testing expansion arts touring and will enlarge the effort in Fiscal 1975. Touring in expansion arts (the "Tour-Event" program) will cost less generally than in dance and theatre, and will provide the nation with a focussed look at the accomplishments of the arts and artists as they draw on the force of creativity in the inner-city and the rural areas, with particular emphasis on the talents of the young. This adds a new dimension to the Endowment's other touring programs and a particularly essential one to celebrate the nation's 200th birthday.

Other touring and distribution efforts are being explored with particular concern for community involvement and for the needs of the bicentennial.

MEDIA.

Definite appropriations of $1.35 million are requested (under Availability) for the media, a pervasive force in American life with the potential of reaching just about everyone in this country. The extent to which media offerings reflect high standards, while bringing the arts to people and communicating their excitement, beauty and relevance, offers the Endowment an important challenge.

Programming in the Arts. A major effort in Fiscal 1975, primarily through the Treasury Fund, will be directed toward programming of the arts for the media. Television, radio, film--when used creatively--can in their own way convey an artistic experience to millions of Americans, many of whom might have no access to live performance.

For example, American dance is the best in the world; it has the fastest growing audience of any "live" art form; and recent films prove its potential for a mass audience: the American Ballet Theatre special, "ABT: A Close-Up In Time," being most notable in recent months. The artistic success of another Endowment-assisted effort, this one in the field of music, enforces the belief that music can be shown (and heard) on the media; this film, "Bolero," on the Los Angeles Philharmonic, has been nominated for an Academy Award. Both programs have been shown on national public television and seen by more than six million Americans.

The Endowment is currently assisting another television special on dance, "Alvin Ailey: Memories and Visions," (to be shown May 6) and plans to step up similar efforts in 1975.

Additional projects include:

-- Expansion Arts Films: to make widely available the richness and cultural vitality present today in the nation's inner cities and rural areas.

-- American Authors Films: to transmit our nation's literary heritage through films of great American authors who contribute so much to national and international literature.

-- Short Film Showcasing: to package and show the best short films made by American filmmakers. The short film has been neglected, though it often presents the art of film at its peak--it is as if, in literature, the short story were thrown out and only the novel existed.

-- American Film Series for Television: to gather for television broadcast a series of films by the great masters of American film. In addition, interviews will be conducted with the directors, enlightening the viewer as to the skill, craft and artistry required in the making of film, an art form born in this country.

Endowment/Corporation for Public Broadcasting. This Program enables cooperative efforts between the Endowment and CPB. Grants are made jointly for a variety of purposes, including some programs, conferences, experimental work.

Regional Development. Regional film centers are an increasingly important resource for historians and students of film, and for the growing numbers of people who flock to see examples of outstanding fiimmaking from the past and of current developments in the film arts. These centers tend to be housed in museums and on university campuses; they sometimes include archival as well as exhibition activity; there are about 15 of them in the country today with the number on the rise; Endowment grants in FY 1974 ranged from $2,000 to $25,000 (three grants at the maximum). The maximum will hold in 1975, with increments in some of the smaller grants and an increase in the number of centers assisted.

ARTISTS IN RESIDENCE.

$3,800,000 is requested for a variety of highly successful residency programs.

Artists-in-Schools. Particular emphasis will continue to be placed on the Artists-in-Schools program. Launched in FY 1969 with a $100,000 transfer from the Office of Education, the program today is bringing practicing professional artists into elementary and secondary school classrooms in all states and special jurisdictions.

The main emphasis in the beginning years has been on painters and sculptors, poets and writers, and dancers, thousands of whom are now practicing their craft and providing informal instruction to thousands of children across the country. For example, during the current school year, the poetry component alone is involving 1,200 poets working with 500,000 students and teachers in about

2,000 school districts (there are 16,600 school districts in the country). The effect continues to be outstanding, on the children, their teachers, their communities, and on the artists themselves. The state arts agencies administer the funds; the Endowment provides coordinating and advisory services; and local school boards cooperate. The Office of Education assists with coordination and may continue to provide additional funds.

In the current fiscal year, a special crafts component was added. To indicate the dynamism of the program, within five weeks of announcement, applications were received from 36 state agencies for more than $300,000, to be matched in cash with an equal amount.

In 1975, the National Council recommends expansion of the Artists-in-Schools program and suggests increased emphasis on music, theatre, and architecture and environmental arts. The Council also urges the inclusion of folk artists. The Endowment will begin using the Treasury Fund for a limited number of special projects, and, encouraged by the success of the new crafts component with its at least 1-1 cash match requirement, will push for increasing dollar commitments from state, local, school, and private funding sources.

Other Residency Programs. The residency concept of Artists-in-Schools has been translated to placing professional artists in settings outside the schools for the purposes of raising perception and developing skills. Grants in this area, ranging from $5,000 to $30,000, have been made to a number of community cultural centers under a developing program, alternative education forms. The residency concept has also been used for some years in the Poets in Developing Colleges program, which began by assisting developing colleges, primarily black in enrollment, to bring professional writers onto their campuses. Pilot programs in Wyoming and Alaska, expanding the concept to community colleges, have been equally successful; this part of the program provides grants ($10,000 maximum) wherever possible to state arts agencies for groups of community colleges.

The Endowment will also continue its ongoing program enabling art schools, colleges, and community centers to hire distinguished artists, photographers, critics, and craftsmen, generally for short-term stays, to stimulate and instruct young artists and students. Grants generally range from $800 to $4,000.

EXPANSION ARTS.

The National Council holds strongly that the expansion arts programs encouraging the creative activity of people from all walks of life and all ethnic backgrounds are absolutely central to the Endowment's purpose. In addition to funds budgeted elsewhere, the request here is for $4,075,000 for critically-needed funding for instruction and training, arts exposure programs, and community cultural centers.

Further, in a major move to strengthen this program as a whole, a pilot effort will begin with state arts agencies, in the belief that they should and will step up their own involvement with these types of activities. With their proximity to local effort, the state agencies may be able to assess and administer many projects with greater effectiveness than the Endowment.

Also, their participation can help make this program more national in scope since available federal funds are totally inadequate to meet even the present demand.

ACCESSIBILITY AND AWARENESS.

$3.1 million is requested for programs that make the arts accessible to people, and encourage their awareness of the value and importance of the arts, often by placing them in other than traditional settings.

Works of Art in Public Places. In the visual arts, the Endowment will continue aiding the placement of art in public spaces, including sculpture, crafts, murals. Matching grants range from $2,700 to $45,000. Through this program, alternatives to viewing art in institutional settings are being provided and American art is being made more widely available to citizens (in 31 cities and communities to date) who might never experience its vitality and relevance. The environment is greatly enhanced, and people's sensitivity to their physical surroundings is further developed, particularly as community involvement in these projects generally is very high. The Endowment is also providing significant advisory assistance to the General Services Administration in implementing its art for public buildings program.

Visual Arts in the Performing Arts. Initiated in FY 1973, this program is similar to the above in that it uses the talents of visual artists in alternative ways to normal institutional settings. The program of matching grants, ranging from $1,500 to $6,000 last year, enabled: 1) the commissioning of outstanding posters for performance groups to be displayed on buses, in subways, concert halls, and schools, and to be available for purchase at modest prices; and 2) assistance for performance groups to secure exceptional artists as designers for sets, costumes, lighting. The projects benefit individual artists as well as performing groups and call greater public attention to the works of both.

Photography. The Endowment's Visual Arts Program is encouraging the exhibition of photography as an art form, often in other than museum settings. It also has a program of publications to increase public awareness and fellowships that will be augmented in Fiscal 1975 to include photographic surveys of American life.

Wider Availability of Museums. The Museum Program must be able to respond to needs of museums to reach out into their communities with a broad range of innovative programs. Programming is being developed with particular audiences in mind. Media is being used. Collaborative efforts between more formal museum institutions and community galleries are increasing. The National Council feels that this is a key area of enlightened museum support in America today.

Access to Theatre. The Council is concerned with the need for monies to meet an increasing demand from areas of the country totally without access to professional theatre. The Endowment began a pilot program this year for state arts agency projects aimed at meeting this need. It hopes to expand this effort in 1975.

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Cultural Facilities Research. Because of evolving art forms and increasing audiences, and different settings for performance and exhibition, it is essential that facilities be designed that meet unique and often changing requirements. The Endowment receives about 50 requests a month for financial assistance in the professional design and construction of cultural facilities (both new buildings and the renovation of old). This expression of need comes from all states and from urban and rural areas alike.

As a first step toward meeting this need, the Endowment plans to assist major research on cultural facilities that will be useful to all persons or organizations wishing to build or renovate or adapt -- i.e. to compile a body of knowledge that exists in fields of health, education and housing, yet is barely existent in an equally specialized field. In contrast to earlier thinking in this area, the Endowment is not proposing assistance toward design fees; and the Council's general policy against actual construction aid (except for preservation purposes in the nation's museums) has not changed.

At its September 14-16, 1973 meeting, the National Council on the Arts passed unanimously a resolution encouraging cultural institutions to take steps to increase their accessibility to the physically handicapped. One grant (from the Architecture Program) will assist workshops to explore ways and means; the Museum Program guidelines provide that funds will be available for surveys in this area. The above-mentioned program for cultural facilities research will further the aim of the Council's resolution.

Architecture and Environmental Arts. The physical fabric of a country can be no better than the level of awareness of its citizens. Yet awareness of the importance of architecture and design is scant indeed. The Endowment's public awareness program in this area is being stepped up to help educate people to the importance of their own role in the design process and encourage sensitivity to their surroundings. Grants assist the development and dissemination of materials and methods for communicating design awareness, through publications, films, tape cassettes, exhibitions, workshops. And to extend the impact of this kind of essential activity, a pilot program now underway with state arts agencies is stimulating their involvement, often for the first time. One agency has used a small Federal grant to send a "roving design expert" around the state to encourage community awareness and participation in design efforts; another is establishing in effect an office patterned after the Endowment's. In FY 1975, it is very important to increase these activities, both at the Endowment and in the state agencies.

FEDERAL-STATE PARTNERSHIP.

Approximately $14.4 million of definite appropriations are being requested for the Federal-State Partnership program (plus an estimated $5.3 million to state and regional arts agencies through other Endowment programs).*

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* The new authorization legislation requires that at least 20 percent of the Endowment's overall definite appropriation be directed to state (and, to a lesser extent, regional) agency efforts; and, further, that 75 percent of this 20 percent must go in "bloc" amounts to the 55 state (and jurisdictional) arts agencies, with a minimum of at least $200,000 available to each state agency.

It has been clear for the past few years that some very exciting developments are occurring in the relationship between Federal, state, municipal and community arts programming. The National Council has expressed a strong desire to build these efforts. It believes that additional moves in this direction should be developed in closest cooperation with the agencies in the 55 states and jurisdictions. It is convinced that all possible steps must be taken to encourage creative state and regional programming and efficient administration as well as stepped-up state and private funding. (It should be noted that some state agencies have had dramatic increases in state funding, though in many, state funding is not keeping pace with increasing Federal monies.)

In response to these state agency and National Council concerns and potentials, the Endowment, in addition to granting $150,000 to each state agency in Fiscal 1974 and $200,000 each ($11 million) for FY 1975:

1) initiated a major Program Development assistance effort in Fiscal 1974 (estimated $860,000) that will be continued in Fiscal 1975.

2) has increased state agency membership on each of the Endowment's program Advisory Panels to a minimum of two.

3) developed guidelines for the Federal-State Partnership program, in cooperation with the state agencies.

4) is revising all Endowment program guidelines to invite state and regional agency participation; has transferred the Dance Touring Program in large measure to the state (and/or regional) agencies; and is exploring moving additional programs in this direction.

5) has held some of its Advisory Panel meetings in conjunction with national assemblies of state arts agencies.

6) convened a conference of 17 state agency directors in September, 1973, to discuss specific policy and administrative matters that were being revised -- following which they participated in the National Council's fall session.

7) will convene a major meeting of all state agency directors and chairmen April 16-18, 1974.

8) will launch this year a study effort to gather and analyze state agency financial and programmatic information.

9) will continue to encourage regional arts programming, either through regional agencies or through state arts agencies acting in behalf of regional groupings of state agencies.

10) will make funds available under an important new program (piloted in FY 74) to assist community arts councils through their state arts agencies.

The coming-together of so many factors--decentralization, local involvement, interest in the bicentennial, developmental concerns--argue that the Federal-State Partnership, in its broadest sense, is indeed an area of prime importance in making the arts available to all Americans.

II. Cultural Resources Development

Actual FY 73	Estimate FY 74	Estimate FY 75	Increase
$ 13,206,563	$ 12,811,819	$ 14,300,000	$ 1,488,181

[The Treasury Fund (gifts and matching) in the past has been used most effectively in the category of Cultural Resources Development. Therefore, the Endowment anticipates that in 1974 and 1975, a significant portion of Treasury Fund monies, in addition to amounts reflected here, will continue to go into this area.]

America's cultural institutions -- museums, orchestras, choral and chamber music groups, opera, dance and theatre companies -- are second to none in the world. They are composed of the artists and craftsmen of our time. They sustain creative effort and convey unique insights to millions of people both here and abroad. Their development in recent years has been nothing short of phenomenal and is due in considerable measure to the stimulus Federal funds have provided in attracting increased assistance from all sectors of society.

A word of caution must be expressed. Energy and inflation problems could begin to erode the tremendous gains that have been made. The Endowment is itself making every effort, and encouraging creative planning among its constituents, to insure that our cultural institutions continue to develop and meet the demands of their growing publics.

MUSEUMS.

The Fiscal 1975 request for the museum programs described in this section is approximately $4 million in definite appropriations.

America's museums collect, preserve, and exhibit this nation's great treasures in art, history, and science. They serve as a source of inspiration and challenge to people living today. They conduct myriad educational and community programs.

In May 1972, the Arts Endowment contracted for a major survey of the nation's museums. This effort was in line with the Council's desire to provide information of use to the field as well as help develop the Endowment's program planning. The national service organizations for museums all endorsed the study and offered full cooperation.

Included in the survey findings:

-- 1,821 institutions, with annual operating budgets ranging from $3,700 to over $20 million, filled the minimal "qualifying" requirements set by consultant museum professionals for inclusion in the study.

-- operating expenditures of the 1,821 totaled nearly $479 million in FY 1972.

-- attendance was over 308 million.

-- 93% conducted activities for groups of school children.

"Museums USA: Highlights," a 20-page booklet summarizing key data, was released by the Endowment in December 1973. A book with detailed results and analysis will be published in summer 1974; the background statistical report now being edited will be made available; and the Endowment is planning workshop/conferences with museum and other experts to explore fully the survey's implications, not only for museums, but for all cultural institutions.

Increases in Endowment funds for museums under Cultural Resources Development will go toward assisting some of museums' essential functions. Monies will begin to meet the demand for matching grants to assist special exhibitions (28 percent of the FY 1974 funds went for bicentennial exhibits, with a sharp rise anticipated in 1975 and 1976). A significant number of these special exhibitions travel widely after showing at the sponsoring museum, multiplying their effects well beyond the initial showing.

Grants which specifically require new matching monies will be expanded under the highly successful program assisting purchase of living American artists' works, including painting, sculpture, prints, photographs, film, and crafts. The Endowment helps a variety of other on-going museum activities, including better utilization of collections for their publics, catalogues, and visiting specialists to come in for short-term stays to help deal with specific museum needs. (It is in this latter category that museums may survey methods of increasing their accessibility to the physically handicapped.)

In addition, the Endowment supports conservation and renovation for preservation purposes, and provides fellowships for museum professionals and funds for museum training. These programs are described later in the Cultural Legacy portion of this presentation.

MUSIC.

Funds requested, totaling $6.2 million in definite appropriations, will assist the nation's orchestras, opera companies, and choral groups, and will enable the Endowment to initiate a chamber music program.

Orchestras. There are over 1,100 orchestras in the nation, with annual budgets as high as $6.7 million. Approximately 100 of them are eligible for matching project grants from the Endowment. During Fiscal 1974, grants ranged from $6,200 to $140,000, with nearly 85% of the grants for projects involving youth. The $140,000 maximum, up from $100,000 in FY 1973, will hold in Fiscal 1975. The Endowment is currently providing some additional funds for special bicentennial projects, primarily commissioning and performance of American works, which would otherwise not take place.

Opera. There are more than 750 opera groups in the country. Approximately 45 professional companies -- the top budget (excluding the Met) being around $5.5 million -- received matching grants rang-

ing from $4,500 to $140,000 in FY 1974. Funds are used for a variety of activities, including training/apprenticeships for young American singers, new productions, touring, and school programs. The maximum level of Endowment support will hold at $140,000, with any additional funds, this year and next, going into special bicentennial programming. (An exception to this maximum -- a challenge grant through the Treasury Fund -- is being made in 1974 and 1975 for the Metropolitan Opera Company to enable it to broaden support from its national audience.)

Choral. Choral music has its roots deep in American tradition. There are thousands of choral groups throughout the country; the Endowment has provided assistance to a very small number of these. Choral music will be aided in Fiscal 1975, with funds for institutes in different sections of the country to upgrade quality broadly; and a limited number of grants encouraging contemporary music programming as well as revivals of some of America's great old choral masterpieces.

In general, this pilot program will continue to assist highly professional groups and the institutes in 1975, while efforts are made to assess realistically the entire field and the Endowment's proper role in relation to it.

Chamber Music. At the Council's urging, the Endowment plans a pilot program for chamber music groups in Fiscal 1975. Some of the finest musical repertoire extant today was, and is being, created for chamber groups. The music is often more "accessible" than full symphonic music; the groups are smaller and more portable. It is important to develop programming to suit the specific needs. Guidelines are being developed.

THEATRE.

Definite appropriations totalling $3.1 million are requested for the following programs in FY 1975.

Professional Theatre Companies. Of the more than 3,000 theatres in the country, approximately 50 professional groups (highest budget: $3.9 million) are receiving Endowment funds this year; the number eligible will increase. The growth of these nonprofit professional theatres around the country is a relatively new and very important development; they are increasingly the source and home of some of the best playwrights, directors, and performers in American theatre today.

In Fiscal 1974, the Endowment's grants ranged from $5,000 to the new maximum of $140,000 (six theatres received this latter amount). The maximum will remain the same in 1975, with increments to some of those now receiving lesser amounts and some new groups receiving grants. (Depending on pilot/planning grant results, and on developments regarding energy, the Endowment's thrust next year will be in support of touring perhaps six to eight of these groups -- see Availability.)

Theatre for Youth. A number of professional theatres for youth will also receive assistance; this program, which generally assists these groups in their touring activities, will expand somewhat in 1975 following the recommendations of a committee of the Theatre Advisory Panel.

DANCE.

The request is $625,000 in definite appropriations for these two programs.

Resident Professional Dance Companies and Management and Administration. In addition to the three major and perhaps 60 smaller contemporary dance companies, which are most often touring companies and are supported through Endowment touring programs, there is an increasing number of resident professional dance groups located around the country which have a unique role in American dance. They help satisfy audience demand, create new interest, and, importantly, provide the training ground for many of this country's superb young dancers. As training grounds and important cultural resources, their role is critical to the American dance scene.

The Endowment's two programs, begun on a pilot basis in Fiscal 1972, assist in strengthening professional management, and help resident companies to upgrade their artistic standards, engage guest choreographers/directors, and broaden their service to their communities. Thus far, the Endowment has been able to assist about 18 of the approximately 30 resident groups, with grants ranging from $4,000 to $35,000. In Fiscal 1975, the maximum would move to $50,000 (through the Treasury Fund) and more companies would be assisted.

LITERATURE.

In the literary world, the "institutional structure" is provided by the variety of publications or other means of communication which, much the same as theatres, orchestras, etcetera, make it possible for artists' works to reach people. $400,000 is requested for Fiscal 1975.

Literary Magazines. Without the small literary magazines, many of America's most vital creative voices will not be heard. In Fiscal 1975, the Endowment will continue its assistance to the Coordinating Council of Literary Magazines which provides small grants, and services, to many of the perhaps 1,000 literary magazines in the country. These publications are feeling the impact of sharply rising production and paper costs and increases in postal rates, matters of continuing concern to the Literature Advisory Panel and the Council.

Independent Presses. In addition to assisting the small magazines, the Endowment will aid some of the excellent literary presses, which have a unique role in publishing and distributing literary works unlikely to be handled by commercial publishers.

III. Advancement of our Cultural Legacy

Actual FY 73	Estimate FY 74	Estimate FY 75	Increase
$10,271,340	$ 14,047,786	$ 20,125,000	$ 6,077,214

America's extraordinary cultural legacy springs from the unprecedented diversity of our origins. It finds its voice in unique artistic expression -- this is the country in which the film arts were born, in which the blues and jazz came into being, in which dance, architecture, the crafts and folk arts reached new levels of achievement. The preservation and encouragement of that voice is perhaps the most fundamental task of the Endowment.

CREATIVE DEVELOPMENT.

The voice of the nation's cultural legacy is the voice of its creative talents. Of the $20 million requested for Advancement of our Cultural Legacy, $5.8 million will aid a variety of creative development programs.

Fellowships. Most of the Endowment's programs assist individual artists -- Artists-in-Schools, other residencies, Expansion Arts, Works of Art in Public Places, Visual Arts in the Performing Arts, Museum Purchase Plan -- but with enthusiastic encouragement from the National Council, the Endowment has been increasing fellowship programs for individual artists of exceptional talent as funds became available. There are now fellowships for choreographers, painters, sculptors, craftsmen, photographers, creative writers (including playwrights), librettists, composers, jazz/folk musicians, radio/CATV/television professionals, and filmmakers.

There are basically two types of fellowships: one aimed at a specific end result, e.g. creation and performance of a new dance work; the other aimed at career development, e.g. buying time and materials for a creative artist. Fiscal 1975 will begin fellowship programs for translators and for radio/television writing, and will offer increased funds particularly for craftsmen, choreographers, filmmakers, painters, and sculptors.

New/Developmental Work. Also essential to creative development in most fields of the arts is the opportunity for new/developmental work. The Endowment funds contemporary music groups, developmental theatres, new play producing and playwriting groups, and visual arts and crafts workshops.

In addition, the Endowment plans to encourage the growing activity in commissioning and performance of new American music, long a priority of the Music Advisory Panel and the National Council. Spurred by the bicentennial, these efforts will affect positively the nation's orchestra and opera programming far into the future.

Professional Training. Diverse, usually pilot, programs approaching the great need for assistance for training professionals in the arts have been developed by the Endowment. The agency believes that more needs to be done in pulling together current efforts and exploring others to meet the demands. A variety of pilot programs is already operating or planned in professional design, dance and visual arts criticism, music, media, theatre, museums, and arts

administration. This is a troublesome area for the Endowment because, among other reasons, the funding needs are great and the means by which high quality training can be accomplished are so varied among the diverse fields.

INDIGENOUS AMERICAN ARTS.

Some art forms are thought of as being truly American. Film started here; so did jazz and modern dance; and our craft and folk arts have a distinctively American flavor. They are a source of national and international pride, and, particularly as we approach our 200th birthday, deserve increasing focus. The request is $3.7 million for this area.

Crafts. The Endowment, following over a year of consultation with crafts experts, secured a professional staff person to serve as Crafts Coordinator. Spread throughout Endowment programs are funding possibilities for crafts, including, for example, in expansion arts activities, for museum purchase, special exhibitions, residency programs, workshops, etcetera. Plus there are fellowships for craftsmen in the Visual Arts Program (the Coordinator is located in this office). The National Council (which responded warmly to one member's eloquent statements in behalf of a return of a sense of craftsmanship throughout American life) has recommended a go-ahead on an apprenticeship program in crafts.

The Endowment is also talking with state arts agencies, many of which are involved in this area, about cooperative efforts. And a major liaison effort with other Federal agencies (with substantial budgets and crafts-related activities) should result in very significant additional monies for crafts.

Folk Arts. Support for the folk arts has been spread (often, too thinly) throughout various program areas of the Endowment, particularly in music and expansion arts. The Council is determined that the Endowment make a major coordinated effort to enhance the nation's rich and diverse folk arts. Folk arts cut across all disciplines, and should. Experts have been called in to help the development of this new thrust, including an advisory meeting of folk artists and folk culture experts held by the Arts Endowment on December 8, 1973. A Folk Arts Coordination office will be established in the Endowment in spring 1974.

The Endowment is determined that crafts and folk arts programs will play a significant role in its bicentennial efforts. The bicentennial can serve to encourage pride and enhance our appreciation of the crafts and folk arts. Relatively small amounts of money can have a substantial national impact in these areas, an impact which will be multiplied with the participation of other Federal agencies as well as the state arts agencies, including, for example, in the major Artists-in-Schools program as well as other areas.

Film. In addition to the Endowment's other efforts including aid for regional film centers (see Availability), and film preservation, the American Film Institute would continue to be assisted in its efforts to preserve and enhance the art of film in this country. Endowment funds aid most of the Institute's program thrusts (except the film theatre at the Kennedy Center; and the film catalogue project assisted by the Humanities Endowment), including advanced film training, servicing of regional film centers, research,

information, and publication activities. Private monies are supporting apprentice programs with outstanding film directors as well as oral history projects. The Endowment's assistance (not counting contracts for filmmaker grants and preservation) will be at the $1,100,000 level.

Dance (facility). American dance, particularly in its more contemporary forms, is the fastest growing live art form, due at least partially to the Endowment's touring programs. Yet dance is still without a single major facility devoted to its use. Therefore, the Endowment is exploring with the field and private funding sources encouragement of a national center for American dance. It would logically be in New York which is still the home-base of most touring dance companies. It can provide performance space with international visibility; provide services for all American dance companies; offer training programs, workshops; experiment with filming and videotaping. It would be carried out with Treasury Fund monies; some program funds are required for further development of the plans and possible "start-up" costs.

During the last year the Endowment investigated thoroughly the possibility of using the ANTA Theatre as such a center. On the advice of professionals in the field it was concluded that substantial renovation would be necessary. Efforts to identify non-Federal support for such renovation have not been successful. A committee of the National Council has been appointed to consider the future of the ANTA Theatre, and funds necessary for FY 1975 have been budgeted.

Jazz/Folk/Ethnic Music. This has been one of the Endowment's most successful programs, expanded this year to include folk and ethnic music. Grants assist composers, arrangers, instrumentalists, outstanding young musicians, and schools and community groups which wish to bring programming to their students. In addition, the Endowment has been exploring, particularly with the Library of Congress and the Smithsonian, the creation of a really meaningful archival effort. Many of the old masters of American jazz must be captured on tape; their works must be found and restored to today's repertories; the same holds true for folk music.

PRESERVATION.

The Endowment plans to augment some of its preservation programs, allocating $2.6 million in definite appropriations for these purposes. Treasury Fund monies will increase this figure substantially.

Museum Conservation and Renovation. A special word is needed about museum conservation and renovation for preservation purposes, to which the Endowment intends to devote $1.8 million in FY 1975, with Treasury Fund monies taking the level to over $6 million in private and Federal funds.

The National's great treasures are deteriorating. An estimate showed that there are perhaps 12,000 institutions (museums, archives, libraries) in this country with materials sorely in need of conservation efforts. Yet, there are only 250 practicing conservators in the country, many of whom are nearing retirement age. Training is essential, and the Endowment is assisting a variety of such efforts.

In addition, the Endowment is supporting regional conservation centers to make equipment and expertise available to as many museums as possible as well as train future conservators.

But thousands of dollars could be spent saving works which have gotten into their current condition because of harmful storage, exhibit, and climatic conditions, without reaching the core of the problem.

The Endowment launched in Fiscal 1974 with at least $3 to match each Endowment $1 a program to help museums renovate their facilities -- climate control, security, storage -- in order to conserve their works. The funds allocated in Fiscal 1972 and 1973 went primarily to enable institutions to assess their needs. A few selected renovation projects were funded. As noted in testimony last year, this program has strong implications for the bicentennial -- the preservation of our American heritage. The Endowment plans to continue funding of surveys and renovation projects; most of the latter are financed through the Treasury Fund.

Film Preservation. The current efforts in film preservation are barely holding the line against rapid deterioration.

As noted in earlier testimony, the area of film preservation is one of serious concern. The Endowment plans to continue to provide $300,000 (plus administrative costs) through the American Film Institute in Fiscal 1975 to assist film preservation programs of the Library of Congress, the Museum of Modern Art, George Eastman House, and the AFI. It is hoped that private funding sources will realize the urgent need to join with the Endowment for a period of years in order to preserve this important aspect of our heritage.

Dance Preservation. Dance works, unless performed regularly, exist generally only in the minds of their creators and performers. A variety of critically-needed efforts, primarily using media -- film, videotape -- must be launched now to capture and preserve American dance. The National Council enthusiastically urged implementation of the recommendations which followed a major three-day conference in December 1973. Leaders from the media, some of America's great choreographers, dance archivists, and the Dance Advisory Panel viewed examples, past and present, of the relationship between dance and the media. The Endowment's Public Media Program will take major responsibility (under Programming in the Arts) for specific film/television programs in dance for the public; and the Dance Program's first priority and primary thrust will be to document and record before much of America's great dance genius is lost.

Architecture Preservation. As our nation approaches the bicentennial year, there are few needs clearer than a vigorous new program designed to preserve and return to useful purposes the most visible reminders of our past -- our two hundred years of architectural heritage. While there exists a strong private tradition in this country for architecture preservation, the Federal Government should encourage the movement to revitalize the country's resources. Over one-third of the structures listed on the National Register of Historic Sites since 1930 have been destroyed. A major new thrust is needed, with emphasis on adaptive uses for old structures in today's society. The Endowment is working closely with a wide spectrum of public and private groups, including HUD, Interior, and the National Trust for Historic Preservation. In addition to these important catalytic/coordinating activities, the Endowment's "City Options"

program is contributing very significantly to America's growing efforts to save the best of the past for the future. In FY 1975, additional research grants will also further this aim.

The whole preservation program of the Endowment takes on greater importance as the bicentennial approaches. As the President said on September 14, 1973: "As we look to the next four years, our concern for the arts will focus increasingly on the commemoration of America's Bicentennial. That occasion prompts us to recognize the need to preserve this Nation's heritage of paintings, of films, and of buildings of historic importance and appeal which can be saved for the future by being adapted to new uses today."

THE ENVIRONMENT.

Attention to the aesthetics of our environment -- beyond the clean air and water concerns -- is long overdue. This is another field in which the Endowment, in addition to allocating $2.6 million in 1975, plans to continue its active role in engaging support and interest at all governmental and private levels. Efforts in Fiscal 1973 and 1974 proved that success is eminently possible.

"City Options." The national theme approach to research last year was, in the view of the Council, one of the most significant innovations of the Endowment's programming in architecture. Nearly 40 grants for "City Edges" were announced last spring and were selected from over 350 applications and some 1,600 inquiries.

Funds go to specific projects that could be models for other communities and have demonstrable impact by 1976. (This program, and Federal Design, are bicentennial programs; results will be highly visible by calendar 1975.) The pilot program "City Edges" evolved into the new "City Options" in FY 1974, with the Endowment planning to "double-up" the review and funding process. Response to announcement of "City Options" was so heavy (3,500 inquiries and nearly 700 applications) that the Endowment will screen all applications at one time, and will use FY 1974 and FY 1975 monies. This should not only help administratively, but should also insure that a very significant impact will be felt. Further, based on experience with "City Edges," more clearly defined criteria were developed for the review process and regional panels were established to make preliminary review of applications before national panel consideration.

Federal Design. The Federal Design Program is well underway. This bicentennial program is a Presidentially-initiated four-part effort: Federal Design Assembly, task force on Architecture Guidelines, task force on Civil Service design hiring and training procedures, and Federal graphics improvement program. Enthusiastic cooperation is coming from the Federal Government and private interests as well. Importantly, state and municipal governments are beginning to institute their own programs.

GENERAL PROGRAMMING, RESEARCH, SERVICES.

Funds totalling $5.5 million will insure the flexibility, grasp of the field, and vital private service underpinnings which the National Council is convinced are essential to the overall strength of the cultural field and the Endowment's programs.

General Programming. Just as Council members feel strongly about flexibility to respond to new thrusts, they feel it imperative that the Endowment budget funds for significant projects that do not fall within guidelines. While the Council has applauded and participated actively in development of guidelines, it feels the worst thing would be for the Endowment to find itself locked into rigid patterns and unable to respond to important requests.

Accordingly, the Council has consistently urged, particularly because planning is done far in advance, that a minimum of 10 percent of total funds be held in this area. The Endowment, however, because of clear and specific needs in the fields and modest funding levels in relation to those needs, feels it cannot set aside any more than the 4 percent requested.

Research. To date, the Endowment has basically used Program Development and Evaluation monies for research efforts, such as the national museum study. Increasingly, however, the Endowment is being asked to assist research, initiated outside the Endowment for the most part, aimed at gathering information or attempting experiments of direct and immediate benefit to the field. Both kinds of efforts should be assisted, and their complementary nature continually assessed by the Endowment.

Services to the Field. A critical role in the advancement of our cultural legacy is played by a variety of groups and individuals, ranging from national service organizations to artists' workshops. Included are groups such as P.E.N. (Poets, Playwrights, Essayists, Editors, and Novelists) American Center, OPERA America, American Symphony Orchestra League, American Association of Museums, Association of American Dance Companies, Council of Independent Professional Schools of Music, Theatre Communications Group, and National Association for Regional Ballet. Significant increase of supportive funds could substantially improve artistic and administrative standards in the arts.

It should be noted that many of the organizations provide information that is helpful to the different fields but which is also extremely important in keeping the Endowment apprised of developments so that it can be responsive to the fields. For example, many of the service organizations are collecting, sharing, and disseminating information on bicentennial activities and on the impact of the energy shortage, both areas of vital interest to the Endowment.

Importantly, Endowment funds are used by many of these organizations to fill the major need of the nation's thousands of semi-professional and amateur arts groups: technical assistance. The national service organizations' workshops, conferences, research, publications, consultants -- all enable the Endowment to assist actively America's exciting, and probably unparalleled, nonprofessional arts world.

The Endowment feels it essential to strengthen and encourage private service groups in the improvement of services to all fields of the arts.

* * * * *

Note: The Endowment, believing in its role as catalyst, feels its responsibility includes the encouragement of broad support from all sectors of society. A specific goal is cooperative programming with other Federal agencies.

In the past, transfer funds from and to other agencies, such as the U.S. Office of Education (HEW), the National Science Foundation, the Smithsonian Institution, the Bureau of Indian Affairs, and the National Endowment for the Humanities have permitted significant joint projects.

IV. Program Development and Evaluation

Actual FY 73	Estimate FY 74	Estimate FY 75	Increase
$ 897,720	$ 1,823,250	$ 2,460,000	$ 636,750

Particularly as the bicentennial approaches, the Endowment's leadership role is becoming increasingly vital. Its ability to develop creative and flexible programming and evaluate efforts throughout the cultural field must continue to be strengthened. Approximately $1 million of the 1975 program development funds will insure that the Endowment can call on panelists and other consultant experts as program development advisors and evaluators; can utilize part time and temporary assistance to free up program staff and assist in the development of programs; and can provide for essential on site project visits to evaluate programs.

Additional developmental and/or evaluation needs total over $2,845,000. The National Council and the staff are working to determine highest priorities among, for example:

-- Technical assistance, workshops and coordination in regard to the problems (and potentials) created by the energy shortage.	$ 80,000
-- Federal-State survey, study, and evaluation, requested by the National Council and the state arts agencies.	650,000
-- Survey of professional training and training needs in various arts disciplines.	250,000
-- Continuation of music evaluation studies, including long-term orchestra evaluations and beginning of opera evaluations.	130,000
-- Architecture and design technical assistance for Federal and state agencies as part of the Design Assistance Program.	75,000
-- Interpretation and follow-up on the major museum survey including national and regional conferences.	150,000
-- Survey and evaluation of service organizations in the arts.	350,000
-- Annual Federal Design Assembly.	160,000

Actual FY 73	Estimate FY 74	Estimate FY 75	Increase
-- Endowment program information films to aid present and potential grantees and stimulate private and state and local funding for arts programs piloted by the Endowment.			300,000
-- Study of semi-professional and amateur arts organizations.			700,000

V. The Treasury Fund (Gifts, Donations, and Matching Funds)

	Actual FY 73	Estimate FY 74	Estimate FY 75	Increase
Appropriations	$ 3,500,000	$ 6,500,000	$ 10,000,000	$ 3,500,000
Gifts	$ 3,500,000	$ 6,500,000	$ 10,000,000	$ 3,500,000

In eight years, the Endowment has attracted donations totaling over $16,500,000. It is apparent that this funding mechanism has been successful in the past.

During the current year (1974), the Endowment is using the Treasury Fund method primarily to assist orchestras and opera companies, independent professional schools of music, as well as other major audience building ventures. Fiscal 1974 Treasury Fund monies are being used also in museum programs, particularly in training, special exhibitions, conservation, and renovation. For the first time, state arts agencies are utilizing the Treasury Fund.

In Fiscal 1975, the Endowment will continue to stimulate increased private funding for orchestras, opera companies, theatres, dance companies, independent conservatories of music, and significantly expand Treasury Fund monies for museum renovation for preservation purposes. Also, it is anticipated that the Treasury Fund route will be used increasingly in various projects involving state arts agencies, for audience development in music, and importantly, in programming of the arts on public media. National foundations have expressed interest in the creation of an American Dance Center in New York with Treasury Fund monies and in special attention being given to arts administration.

The Treasury Fund has helped encourage the partnership between the Federal Government and an extraordinarily broad representation of the private sector and other government sources. In Fiscal 1973, the Endowment received 992 donations -- in comparison to 916 in Fiscal 1972 and 519 in Fiscal 1971. Of these, 645 came from individuals -- a remarkable testament to the interest and involvement of our citizens in the arts.

Contributors were varied. As noted, the largest number were individuals, including artists such as Van Cliburn, Harold Prince, Marge and Gower Champion. There were small businesses and major corporations, family and national foundations, banks, hotels, television stations, city agencies and universities, civic clubs and public schools. Donations ranged from $2.00 to $135,000.

Cultural organizations have found the Treasury Fund of immense help in attracting new sources of funds in their communities. It is anticipated that the increased monies requested in this category will be matched. In the event that sufficient outside funding is not secured, the money reverts to the U. S. Treasury.

DONATIONS CREDITED TO THE NATIONAL ENDOWMENT FOR THE ARTS

FISCAL YEAR 1973

Dr. Julian Abrams	$ 25
Dr. Irving Abramson	25
Ms. Helene Ackerman	5
Mr. Lou Adler	110
Adolph's Foundation, The	25,000
A.F. Supply Corporation	250
A. & S. Foundation, Inc.	500
AHS Foundation	12,500
Akron Community Trusts	2,500
Albemarle Theatre, Inc.	50
Alest Realty Inc.	100
Alethria Club of Santa Cruz County	50
Mr. Kermit S. Allen	100
Alumni Association of the Cleveland Institute of Music, The	26,000
American Committee on Italian Migration	220
American Electric Power Service Corporation	1,000
American Express Foundation	1,000
The American French Foundation	2,000
The American Missionary Association	5,000
American National Building & Loan Association	100
American Society of Composers, Authors and Publishers	500
Stebbins Anderson Co., Inc.	100
Miss Elisabeth Amery	25
Mr. Amyas Ames	5,687.38
Anchor Savings Bank	500
Mr. M. Phineas Anderson	5
Dr. & Mrs. E. Cowles Andrus	25
Mr. Theodore Antoniou	100
Mr. Albert Appel	1,000
Dr. John W. Appel	10
Dr. Harold L. Applewhite	100
Arts and Education Council of Greater St. Louis, The	51,400
Arundel Federal Savings & Loan Association	50
Modest Artymiw	15
Mr. William Ashbrook	50
Asolo Opera Guild	10,000
F.C. Atherton Trust	500
Juliette M. Atherton Trust	2,000
The Austin Company Foundation	1,000
Mr. & Mrs. Charles Austrian	1,000
Dr. & Mrs. Robert Austrian	100
Mr. & Mrs. Louis Azrael	25
Mr. Richard Baer	2,500
Mr. E. Bruce Baetjer	140.36
Mr. & Mrs. H. Norman Baetjer	50
Mr. & Mrs. Alan R. Bain	110
Mr. Carl Bakal	25
Mr. & Mrs. Joseph D. Baker	100
Baker, Watts & Company	400
Baldwin Piano and Organ Company	1,000
The Baltimore Life Insurance Company	100
Baltimore Music Club, Inc.	440
Baltimore Scholarship Fund, Inc.	220
Bangor Punta Corporation	500
Bankers Trust Company	500

Mr. W. Daniel Barker	$ 100
Mrs. Margaret H. Barnard	25
Mr. & Mrs. Davis D. Barnett	10
Mr. & Mrs. Bernard S. Barr	102.01
Mr. & Mrs. C. Marshall Barton, Jr.	25
Mr. & Mrs. Carlyle Barton, Jr.	100
Barton-Cotton, Inc.	150
Mr. David W. Barton, Jr.	25
The Barton-Gillet Company	100
Mr. & Mrs. Henry L. Bayles	25
Mr. Frank S. Bayley, III	100
Bayport Foundation, Inc.	510
Bayside Fuel Oil Depot Corporation	50
The Louis D. Beaumont Foundation	100,000
Bechtel Corporation	1,000
Mr. & Mrs. Gordon Becker	200
Ms. Elizabeth J. Bell	15
Dr. John P. Bennett	12
Theodore W. Bennett	98,476
Mr. William H. Benton	250
Berkshire Life	1,000
Mrs. Alan Bernstein	25
Mr. Leonard Bernstein	20,000
Mr. & Mrs. Sidney Bershatsky	100
Miss Thelma Bertie	10
Mr. Roger Berwanger	25
Frank Stanley Beveridge Foundation, Inc.	500
Carroll O. Bickelhaupt	25
Dr. & Mrs. Joseph S. Bierman	25
Billirene Fund	500
Dr. & Mrs. James F. Bing	50
Mrs. Nancy Bishoprick	20
Miss Eleanor A. Bliss	50
Dr. & Mrs. William Bloom	50
Mr. & Mrs. Richard J. Blum	777.86
Board of Estimates	135,000
Mr. & Mrs. John A. Boehm	25
Mrs. A. Curtis Bogert	100
Mrs. Joseph Boland	100
Miss Allison D. Boldra	50
Mrs. Frances Bolno	7.50
Miss Bertha Venne Bonin	5
Mrs. Arthur Bookman	100
Boosey and Hawkes, Inc.	50
The Mary Owen Borden Memorial Foundation	5,000
Miss Ruth Boring	50
Dr. Harold M. Boslow	10
Mrs. Georgia M. Boston	25
Mrs. Bernard Botein	500
Mr. & Mrs. Richard J. Bove	25
Dr. Albert Bowers	12
Mr. Richard L. Bowker	100
Mrs. Philip B. Bradley	25
Dr. Joseph A. Brady	50
Branta Foundation	5,000
Miss Martha Breiden	25
The Breman Foundation, Inc.	500
Mr. Fred Brenner	25
Mr. & Mrs. C. Orville Briddell	25
Dr. & Mrs. Leland S. Briggs	35
Mr. Iso Briselli	100

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Broadcast Music Inc.	$ 1,000
Brockton Symphony Orchestra	100
The Brooklyn Union Gas Company	1,000
Mr. James C. Brooks, Jr.	2,650
Brotherhood Fund	100
Alexander Brown & Sons	1,000
Miss Esther Brown	10
Mr. H. Barksdale Brown	1,000
Mrs. Morris E. Brown	30
Mrs. Rosabelle Brown	7.50
Mr. Mercer Brugler	100
Mrs. Everett C. Bryant	50
Mr. John N. Buch	200
Miss M. Caroline Budd	50
Mr. John S. Bull	500
Ms. Beverly Burger	15
Miss Ethel Burghardt	20
Burkenroad Foundation	200
Mrs. Mildred Messer Burnett	55
Miss Elizabeth Lewis Burr	100
Mr. Davies Burton	25
The Bush Foundation	100,000
Paul Butler Foundation	5,000
Mr. Curtis R. Buttenheim	500
C. and P. Telephone Company of Maryland, The	250
Mr. Elliott Cades	10
Mr. & Mrs. Herbert B. Cahan	25
Calhoun Foundation	1,200
California Theatre Foundation	100,000
Mr. Leo Camp	50
Mrs. Clarence B. Campbell	200
The Campbell Foundation, Inc.	500
Mr. R. McLean Campbell	815
Mr. Robert Capanna	7.50
Mr. & Mrs. Caswell J. Caplan	25
Mr. Max N. Carol	100
Mr. & Mrs. Henry Cartan	2,500
Mr. Arthur Carter	800
Mary Flagler Cary Charitable Trust	55,000
Mrs. Dolores Cascarino	15
Mr. Richard W. Case	741.45
W. Lyman Case & Co.	10,000
Honorable Meyer L. Casman	100
Mort & May Cass	10
Mr. & Mrs. Castiglione	25
The Aaron Catzen Foundation	100
CBS Foundation	3,000
Central Management Realty Co.	50
Mr. & Mrs. Gower Champion	400
Mr. Henry Chanin	1,000
Dr. & Mrs. Charles W. Charny	100
The Chase Manhattan Bank	1,000
Chesapeake Financial Corp.	250
Chi Omega Alumnae	200
Children's Museum Aid, The	30,000
Mrs. Louis M. Childs, II	25
Mrs. Rose M. Childs	10
Dr. Donald Chittum	25
Mr. Kent Christensen	100
Mr. Thomas T. Church	100

City Chevrolet Company	$ 25
Mrs. Clyde Alvin Clapp	500
Clark County School District	600
Mrs. Jean B. Clark	500
Mrs. William E. Clark	50
Miss Barbara Frances Clarke	10
Mrs. Paul A. Clayton	100
The Cleveland Chamber Music Society	600
Mr. Van Cliburn	3,000
Miss Kathryn Cline	30
Mrs. William H. Clipp	25
Mrs. C. Baker Clotworthy	25
Cluett, Peabody & Company, Inc.	200
Mrs. Dora S. Cohen	12.50
Ms. Bernice Collins	6
Collins Foundation	1,000
COMBO (Combined Arts and Education Council of San Diego County)	25,000
Community School District #22	350
Compton Foundation, Inc.	500
Mrs. Stella Conaway	25
Concord Holding Corp.	50
Community Projects, Inc.	200
Community State Bank	800
Dr. & Mrs. C. Lockard Conley	25
Connelly Foundation	500
Mrs. Edward Conner	100
Consolidated Mutual Insurance Company	250
Charles M. & Anna C. Cooke, Ltd.	1,000
Mrs. Charles N. Cooper	200
Ms. Bettie Minette Cooper	200
Mr. Milton Cooper	100
Mr. Maurice Cope	7.50
Corbett Foundation, The	50,000
Cornell Foundation	2,500
Mr. & Mrs. D. Costello	10
The Cowles Charitable Trust	250
Mr. & Mrs. Malcolm Cravens	4,822
Mr. Brent R. Cromley	200
Mr. & Mrs. Arthur Crosby, II	500
Mr. Philip F. Crosland	15
Mrs. Clarissa W. Cumbo	25
Mr. Robert Cutler	600
Cuyahoga Stamping Company Metal Products	25
Mr. & Mrs. Hugo Dalsheimer	500
Mr. Murray S. Danforth, Jr.	34,000
Dart Foundation	100
Miss Mabel Davis	7
Mrs. Jan de Graaf	100
Mrs. Kathryn G. Deimler	25
Mr. & Mrs. Walter J. deLillo	150
Mr. Vincent Dell'osa, Jr.	7.50
Mrs. Carolyn Dengler	15
Mr. Jack deSimone	50
Mrs. Lillian De Siver	250
Mr. George W. Deskin	25
Mr. Charles J. Devenny, Jr.	10
Diamond Shamrock Corporation	400
Miss Martha E. Dick	10
Mrs. Gerhard H. Dieke	25
Mr. & Mrs. Vincent Di Gaetani	15

Mrs. Dudley Digges	$ 10
Mr. Douglas Dillon	500
Dime Savings Bank of New York, The	500
Dime Savings Bank of Williamsburgh, The	50
Dr. Samuel Dimond	10
Dr. Joseph Di Palma	25
Divas & Diamonds	6,000
The Djerassi Foundation	12
Ms. Sylvia Betts Dodd	25
Doll Foundation, Inc.	1,000
The Robert Dollar Company	500
Mr. & Mrs. Ralph I. Dorfman	25
Miss Amelia Dougherty	7.50
Mrs. Ruth Drachman	15
Mr. & Mrs. Allison Drake	50
The Driscoll Foundation	1,000
Mr. & Mrs. George Dudley	10
Mr. & Mrs. Stephen P. Duggan, Jr.	1,050
Mr. Lilburn Dunlap	25
Mr. & Mrs. Robert Dunlop	100
Mrs. A. Felix Dupont	500
Mr. Franklin Durham	30
Mr. & Mrs. Thomas M. Duthie	50
Mr. W. O. Du Vall	1,000
Easco Corporation	250
East New York Heating Supply Co.	50
East New York Savings Bank, The	250
Mrs. Hugh Eastburn	25
Eastman Dillon, Union Securities & Co. Foundation, Inc.	100
Mrs. Milton Edgerton	2,154.35
Mrs. Richard W. Ehret	100
M. H. Eisenhart	50
Miss Violet Ellis	100
Mr. Edward E. Elson	1,000
Equitable Life Assurance Society of the United States	15,000
The Esskay Fund	100
The ETC Charitable Foundation, Inc.	350
Mrs. Bernard Evans	25
Mrs. Mildred S. Evans	10
T. M. Evans Foundation, Inc.	1,000
Exxon Corporation	1,000
Dr. Willem Ezerman	25
Mr. Washington Falk, III	7,500
Miss Frances Fanelli	25
Miss Leah Farber	20
Dr. & Mrs. Robert E. Farber	25
Mr. David Farnsworth	500
Mr. & Mrs. Donn Alexandre Feder	25
Mr. & Mrs. D. T. Fehsenfeld	25
Mr. & Mrs. Harry Feinberg	100
Miss Gertrude Hill Ffolliott	200
Fidelity and Deposit Company of Maryland	250
Fidelity Bank	3,200
Fiduciary Charitable Foundation	25,000
Miss Miriam G. Field	1,700
Miss Bernice Fields	5
Firestone Foundation	2,000
First Maryland Foundation	250

First National Bank of Boston, The	$ 25
First National Bank of Kansas City	240
First National Bank of Oregon	200
First National City Bank, Brooklyn	1,000
Mr. William Fishman	24,668.50
Dr. & Mrs. W. N. Fitzpatrick	25
Mr. & Mrs. Albert A. Flaccoe	25
Mr. Steven Flans	5
The Marcelle and Edwin M. Fleischmann Foundation, Inc.	150
Mrs. Horace T. Fleisher	50
Miss Susan Fleisher	50
Mr. G. James Fleming	25
Mr. Daniel Flinn	50
Mr. Michael Foley	300
Mrs. Irving Forbes	100
Forward Industries	25
Mrs. James W. Fosburgh	500
Mrs. Mary G. Fox	10
Mr. Bertram A. Frank	25
Mr. & Mrs. Eli Frank, Jr.	50
Mrs. Tenney Frank	50
Mr. & Mrs. Lester C. Frank	25
Mr. & Mrs. Richard E. Frasch	35
Miss Hazel Fraser	20
Frear Eleemosynary Trust	1,000
Miss Joyce L. Freeman	25
Mr. Irwin Freundlich	500
Mr. Herbert S. Friedlander	50
Mr. Arthur L. Friedman	100
Mr. & Mrs. Harry Friedman	50
Mrs. William O. Frohring	6,000
Fromm Music Foundation	500
Fromm Music Foundation at Harvard	24,180
Mrs. Henry R. Fulton	100
Mrs. Charles Gallup	15
Mr. Foster R. Gamble	500
Dr. Mark E. Gann	25
Mrs. Orpha Gardner	65
Mrs. Audre D. Garbat	50
Mrs. Oliver Gasch	25
Mr. Gusztav Gasper	10
Mr. Irwin Gelber	25
General Elevator Company, Inc.	50
General Mills	2,000
General Telephone & Electronics Found.	2,000
Mr. & Mrs. M. O. Georges	100
Mrs. Virginia Gerrity	2,000
Mr. M. Phillip Gianfortune	7.50
Mr. Rendol L. Gibbons	10
Mr. Jack M. Gill	12
Mrs. Bernard F. Gimbel	1,200
Gimbel Brothers, Inc.	200
Mrs. Sylvia R. Ginsberg	400
Mr. & Mrs. John G. Giumarra, Jr.	50
Mr. Avery L. Glenn	10
Mr. Locke E. Glenn	1,000
Miss Mary C. Golden	15
Sibyl & William T. Golden, Foundation	50
Mr. & Mrs. Albert D. Goldman	25
Mr. Richard F. Goldman	25

Mr. & Mrs. David Goldwasser	$ 1,000
Mr. & Mrs. P. Goodwin	15
Mr. & Mrs. E. Gordon	25
Mrs. Robert O. Gorson	50
Mr. & Mrs. Jack Gottlieb	50
Gould Incorporated	3,000
O. R. Grace Charitable Trust	5,000
Gramma Fisher Foundation	50,000
The Grand Court, Order of the Amaranth	220
Ms. Mary K. Granger	15
Mr. & Mrs. Stephen W. Grant	250
Mrs. Hyacinthe Y. Gray	25
Mr. Lawrence D. Greenberg	500
Mr. Crawford H. Greenewalt	2,000
Mr. Boris Gresov	100
Mr. George W. Grim	25
Mrs. Benjamin H. Griswold, III	50
Mr. Jack Grizzell	5
Mr. Earl L. Gromis	25
Mrs. Herman L. Gruehn	25
Mrs. Grace Dodge Guthrie	50
Mr. & Mrs. Sven M. Gundersen	500
Mrs. Aline D. Gunzberg	400
Mr. Elliott Haas	500
Mr. Joseph Haas	5,000
Walter and Elise Haas Fund	4,000
Mr. John W. B. Hadley	40,000
Mr. Arthur Hafner, Jr.	7.50
J. J. Haines & Company, Inc.	100
Mr. Robert W. Hall	100
Mr. & Mrs. Gustave Halle	3
Mr. Evan A. Hallman	15
Hallmark Cards, Inc.	8,000
Hambrecht & Quist	1,000
Mrs. Oscar Hammerstein	1,700
Luke B. Hancock Foundation, The	15,000
Mr. E. Reginald Hancock	1,000
Mr. & Mrs. R. Philip Hanes, Jr.	4,000
Mrs. Robert L. Harris	15
Mr. & Mrs. George T. Harrison	50
Mr. & Mrs. H. J. Harrison	5
Mr. & Mrs. Ronald B. Hartranft	25
Mr. Robert D. H. Harvey	100
Mr. Henry C. Haskell	25
The Haupt Foundation, Inc.	110
Ms. Margaret Hauser	100
Mr. & Mrs. Richard S. Haver	25
John Rhodes Haverty, M.D.	1,000
The Moses H. & Blanch H. Hecht Foundation	250
Mr. & Mrs. Gordon A. T. Heath	250
The Heckscher Foundation for Children	2,000
Heineman Foundation	1,000
Mr. J. C. Hemphill	60,000
Mr. Abe Hershler	25
Mrs. Joseph K. Heyman	500
Mrs. David Hirschhorn	25
Edward H. & Edna J. Hirst Fund, Inc.	100
Mr. Mark Hodder	50
Mr. Frank Holley	50

Mr. Sidney Homer	$ 15,760
Honolulu Community Theatre	500
Mr. Lloyd Vander Horst	25
Houghton Mifflin Company	1,500
House of Hope Presbyterian Church	5,000
Houston Natural Gas Corporation	100
Harley W. Howell Charitable Foundation	150
Mr. John T. H. Hsu	100
Mrs. Lytle Hull	10,083
Jacquelin Hume Foundation	250
Mrs. Judy J. Hunsaker	10
Miss Sylvia Best Hunter	5
Mrs. Albert D. Hutzler	50
Hynson, Westcott and Dunning, Inc.	500
Ideal Corporation	100
International Business Machines Corporation	1,000
Mr. Bradford McE. Jacobs	25
Mrs. Barbara Jacobson	5
Mrs. Alburta M. James	50
Mrs. Adah K. Jenkins	5
Henry W. Jenkins & Sons Co.	25
Dr. John Jeter	25
Mr. & Mrs. Harold Jewett	25
Board of Governors of The Jewish Museum	25,000
Mr. Allan R. Johnson	1,600
Dr. & Mrs. Gordon K. Johnson	25
Mr. William Johnston	100
Mrs. Alton W. Jones	15,000
Mr. Max E. Jones	250
Mr. Charles W. Jones	40
Mr. & Mrs. Cliff C. Jones, Jr.	25
Mr. Charles F. Jones	25
Sarah H. Joslyn General Endowment Fund	15,000
Juilliard Musical Foundation	105,000
Junior League of Beaumont, Texas	200
Mr. Kenneth Kahn	10
Polly and Gilbert Kahn Foundation	250
Mrs. Edward Kander	25
Louis & Katherine Kane	300
Mr. Robert E. Kanode	25
Kansas City Association of Trusts & Foundations	900
The J. M. Kaplan Fund, Inc.	25,000
Mr. Michael Kaplan	25
Mr. Robert L. Kaplan	10
Mr. & Mrs. Stanley H. Kaplan	25
Dr. Esther Katz	100
Hon. & Mrs. Frank A. Kaufman	100
Dr. James A. Kaufman	1,000
Edgar J. Kaufmann Foundation	1,000
Mr. H. Austin Kaye	100
Dr. Lubov B. Keefer	100
Mr. Albert Keidel, Jr.	1,500
Mr. & Mrs. Willard Keiser	50
Mrs. Mildred H. Kellogg	100
Mr. George Kelly	150
Mr. & Mrs. Thomas J. Kelly, III	25
Mr. Mark Keshishian	1,000
Mr. Walter H. Kidd	100
Mrs. Mary T. Kimball	5
Miss Sylvia L. Kimball	400

Mrs. John T. King, Jr.	$	1,000
Kirchner Brothers		12.50
Mr. Morris Kirsch		1,000
Mrs. Thomas Kirshbaum		10
Kiwanis Club of Lansing, Inc.		50
Mr. George Klein		200
Mr. Philip Klein		1,000
Mrs. Trafford Klots		50
Mr. & Mrs. Gorham B. Knowles		1,000
Mrs. William C. Knudtsen		100
Fred C. Koch Trust Fund for Charity		5,000
Mr. Max L. Koeppel		792.49
Mr. Ira M. Koger		25,000
Mr. Ernest Kohn		10
Mrs. Harold E. Kohn		1,000
Mr. & Mrs. Martin Krasnov		100
Samuel H. Kress Foundation		80,000
Mr. Abraham Krieger		100
Kronheim Company, Inc.		100
Mrs. Charles B. Kuhn		1,000
I. L. Kunian		2,500
Mr. C. Albert Kuper, III		100
Miss Francine Kupferschmidt		15
Mr. John LaCompte		10
Mrs. Edward Laholt		15
Mr. James L. Lane		1,000
Mr. James D. Landauer		25
Mr. Sidney Lansburgh, Jr.		1,000
Lansing Matinee Musicale		100
Lapides Brothers Foundation, Inc.		250
Dr. & Mrs. Arthur J. Lapovsky		100
Lassalle Fund, Inc.		10,000
Mrs. Norman Lassalle		1,900
Mrs. William C. Laurence, III		35
Honorable Peter I. B. Lavan		1,000
Ms. Jo-Anne B. Leker		15.89
Dr. & Mrs. Gilbert G. Lenz		100
Edgar M. Leventritt Foundation, Inc.		29,722.14
Levi-Strauss Foundation		5,250
Mr. & Mrs. Lester S. Levy		103
Mrs. Mildred V. Lewis		10
Mr. Joseph Lewner		100
Mr. & Mrs. Samuel Lieberman		25
Dr. William Lieberman		10
Eli Lilly & Company		500
Nathan Lipson		3,500
Mr. John E. Littleton		500
Frederick R. Livingston		1,000
Mr. & Mrs. David Loeb		25
The Frederick Loewe Foundation		500
Mr. Joshua Logan		1,000
Mr. Stephen E. Loher		50
Miss Audley E. Love		10
Mrs. Gail H. Ludowise		15
Miss Joan Lynch		30
Mr. Robert P. Lyons, III		400
Dr. & Mrs. Louis G. McAfoos		25
Mrs. Betty Myers McAllister		100
Mr. H. G. McBurney		50
Mrs. F. McCarron		7.50
McCormick & Company Fund		250

Miss Elizabeth McDowell	$ 25
Mr. Frank C. P. McGlinn	100
Mrs. Ruth McGrayne	100
Mr. John L. McHugh	400
McInerny Foundation	5,000
Mr. David McIntyre	25
Miss Eunice McLaughlin	50
Mrs. H. H. McLean	50
Mr. Richard J. McManus, Jr.	50
McNeil--Trust of Robert L. McNeil, Jr.	500
MacDonald, Ranald Mr.	800
Morton & Sophia Macht Foundation, Inc.	250
Miss Elizabeth Madeira	50
Dr. & Mrs. William Magruder	25
Mr. & Mrs. David Mallery	100
Manufacturers Hanover Trust Company	1,000
Manufacturers Hanover Trust Company for Estate of Marion H. Kastor	1,500
Mr. F. Grainger Marburg	532
Mr. William L. Marbury	994.89
Dr. Frank C. Marino Foundation, Inc., The	250
Mr. & Mrs. William M. Martindale	75
Maryland Casualty Company	250
Mr. & Mrs. Harold Mason	25
Mr. Harris Masterson	50
Mr. Frank M. Mauro, Jr.	10
Mrs. Judith L. Mausner	15
Mr. & Mrs. William F. May	1,000
Mr. Carroll W. Mead	500
Mr. Ben Meiselman	150
Melanol Foundation, Inc.	1,000
A. W. Mellon Educational & Charitable Trusts	25,000
Mercantile-Safe Deposit & Trust Company	1,000
Merola Memorial Fund	8,000
Charles E. Merrill Trust, The	35,000
Mr. James I. Merrill	1,000
Mr. John R. Merrill	35
Mertz Foundation	20,000
Mr. H. P. Metcalf, Jr.	34,000
Mr. & Mrs. John R. Metcalf	1,000
Mr. James P. Metzler	100
Joseph Meyerhoff Fund, Inc.	250
Michigan State University	500
Midland Symphony League	150
Mr. Solomon Mikowsky	25
Milgram Food Stores, Inc.	100
Miss Isabel Miller	10
Mr. & Mrs. Leon Miller	25
Mr. Maurice W. Miller	5
Mrs. Ron Miller	1,000
Mister Guy, Inc.	50
William Moennig & Son, Inc.	125
Monsanto Company	1,000
University of Montana	200
J & L Montag Foundation	500
Mrs. Hugh Montgomery	25
Mr. Robert E. Montgomery	250
Monumental Corporation	250
Miss Eunice P. Moody	25
Mrs. Ellen H. Moore	10
Mr. Michael J. Moravcsik	50

Morgan Guaranty Trust Company	$ 5,000
Mr. George L. K. Morris	3,000
Mr. & Mrs. Thomas W. Morris	1,000
Ms. M. E. Morrison	25
Miss M. Esther Morrison	25
Mr. A. J. Moulfair	10
Mr. John Moyer	100
Mr. Francis D. Murnaghan, Jr.	2,038.01
Dr. Edward A. Murray, Jr.	5
Mr. & Mrs. Daniel Nathans	25
National City Bank	250
National Music Publishers' Association, Inc.	1,000
N.E.C.M. Alumni Northern Calif. Chapter	200
Mr. Christian Nelson	200
John M. Nelson, Jr. Foundation	1,500
John M. Nelson, III	500
Roy R. & Marie S. Neuberger Foundation, Inc.	15,000
Miss Irene F. Neuman	10
Mr. F. W. Nichols	250
Mr. Charles A. Noble, Jr.	1,500
Mr. & Mrs. Eugene Noble	50
Noble Foundation	40,000
Norman Foundation	25,000
Miss Nellie S. Norris	25
The Noxell Foundation, Inc.	1,000
Roscoe and Margaret Oakes Foundation	65,000
Mr. Terence O'Brien	25,000
I. A. O'Shaughnessy Foundation	50,000
Joseph S. Oettinger Foundation	2,000
Mrs. Elliott M. Ogden	500
Mrs. Jack O'Hara	25
Dr. Gaylord W. Ojers	50
Olin Corporation Charitable Trust	1,000
Mrs. Phyllis R. Oliver	25
Mr. Hilding M. Olson, Jr.	25
Mr. Ronald Ong	135
Mr. David J. Oppenheim	25
Orange County Players Association	300
Mrs. Reuben Oren	7.50
Mr. & Mrs. Richard M. Orin	25
Osolo Opera Guild	10,000
Mr. & Mrs. S. Kaufman Ottenheimer	25
Louise L. Ottinger Charitable Trust	500
Mr. & Mrs. Robert R. Owen	5,000
Mr. Kenneth D. Owens	1,000
Pacific Gas and Electric Company	7,000
Palace of Fine Arts League Inc.	500
Palisades Foundation, Inc.	1,000
Parents Committee	3,197
Ms. Gladys B. Parker	10
Mr. David Paris	25
Mrs. Viola L. Pasquall	50
Mr. Edward M. Passano	25
Mr. & Mrs. William M. Passano	150
Paterson-Leitch-Shenk Foundation	100
Mr. Henry Douglas Paxson	1,000
Miss Bernice Pegram	2
Mr. & Mrs. John G. A. Pennink	100
The Penton Publishing Foundation	100
Mr. & Mrs. Isaac Pepp	25
Mr. & Mrs. Max Perchick	15

Performing Arts Council of the Music Center	$ 100,000
Mrs. Duane L. Peterson	250
Mr. Frederick C. Petrich	25
Mr. Clement Petrillo	25
Mrs. Roberta Jennings Pew	400
PHH Foundation, Inc.	100
Phoenix Clearing House Association	434.11
Mrs. Alburta B. Pierson	20
Mr. & Mrs. Fred N. Pierson	50
Dr. Alfred Pike	10
Miss Floria Pinkney	25
Mrs. Homer Piper	25
Mr. Lachlan Pitcairn	300
Mr. Irvin C. Poley	25
Mr. & Mrs. Joseph Pollock	30
Mrs. William Potter	500
Mr. & Mrs. James W. Powell	25
Mrs. William Prastha	15
Miss Melva L. Price	200
The Rowe and Eleanor Price Foundation	200
T. Rowe Price Associates, Inc.	200
William T. Price, M.D.	1,000
Mr. Harold Prince	100
Mr. & Mrs. Peter P. Pritchett	100
The Prospect Hill Foundation	10,000
Dr. Ruby H. Puryear	15
Mr. & Mrs. George B. Pyle	30
Mr. & Mrs. L. M. Rachofsky	25
Raleigh Stores Corporation	1,000
Mr. Norman P. Ramsey	25
Mrs. Judith S. Randal	1,000
Mr. Francis F. Randolph	500
Dr. & Mrs. William T. Read	200
Miss Gertrude Redheffer	17.50
Mr. & Mrs. William B. Reese	25
Mr. Louis Regenstein	200
Mrs. Florence C. Reilly	50
Retail Dry Goods Association of San Francisco	12,676.22
Mrs. Walter E. Rex, Jr.	150
Mr. & Mrs. Clinton L. Reynolds	5
Mr. & Mrs. John B. Rhoads	50
Mr. Richard H. Rich	500
Richardson and McCartney	100
The Frederick W. Richmond Foundation, Inc.	200
Mrs. Jean M. Riddell	50,000
Mr. Ralph L. Riehle	25
Riggs, Counselman, Michaels & Downes, Inc.	25
Mrs. Robert B. Riss	25
Mr. F. M. Rivinus	25
Miss Besse Rivlin	10
Dr. & Mrs. Paul E. Roberts	25
Mr. James D. Robertson	76,485
Mrs. Jeannette E. Rockefeller	200
Martha Baird Rockefeller Fund for Music, Inc.	10,000
The Rodgers & Hammmerstein Foundation	2,500
Dr. Suzanne Rodgers	50
Mr. & Mrs. Fred Rogers	15
Mr. G. Frederick Roll	500
Mrs. G. Frederick Roll	1,000
Mr. Thomas Root	25
Mrs. Henry A. Rosenberg	1,025

Mr. & Mrs. Henry A. Rosenberg, Jr.	$ 2,025
Henry and Ruth Blaustein Rosenberg Foundation, Inc.	1,000
Mrs. Albert Rosenfeld	100
Mr. & Mrs. Lessing J. Rosenwald	250
Mr. & Mrs. Richard M. Ross	8,750
Mrs. Elizabeth B. Roswell	100
Mr. & Mrs. Randolph S. Rothschild	550
Mrs. Carolyn C. Rowland	500
Mr. & Mrs. Wilson Royer	25
Dr. & Mrs. Laurens Ruben	25
Helena Rubinstein Foundation	6,000
Miss Ella B. Russell	10
Sabine Royalty Corporation (South Texas Development Company)	1,000
Mrs. Ben Sacks	25
Mrs. Milton S. Sacks	10
Dr. & Mrs. Jack I. Safian	50
Mrs. Irving Safren	15
Saga	100
Sakowitz	500
The San Francisco Foundation	76,777.40
San Jose Unified School District	600
Roger W. Sant	12
Mrs. Frank Sarlo, Jr.	10
Fayez Sarofim & Company	100
Mrs. J. Ralph Satterwaite	25
Dr. & Mrs. Bernard Saturen	25
Mr. Robert Saurman	15
Savings Bank of Baltimore	250
Mr. Joseph Savitz	10
Mrs. Raymond G. Scarlett	25
Mrs. Robert M. Schaefer	15
Scheide Fund of Community Funds, Inc.	25,000
Henrietta Rinaldo Scheider Foundation, Inc.	1,000
Julius Schneider & Marie Schneider Foundation, Inc.	1,500
Scherman Foundation, Inc.	3,000
Schlage Lock Company	1,000
Jos. Schlitz Brewing Company	75,000
Schluderberg Foundation, Inc.	100
Mrs. Roslyn Schnaper	50
Mr. & Mrs. Gunther Schuller	100
Mrs. Joseph M. Schulte	10
Mr. Donald S. Schwabacher	974.51
Mr. James H. Schwabacher, Jr.	1,517.84
Mr. Daniel S. Schwartz	500
Mrs. Doris Schworer	10
Sco-Fuel Oil Co., Inc.	200
Mr. Joseph Scorcia	100
Mrs. Yvonne Scorcia	100
Mrs. Margaret A. Seamster	1,000
Sears-Roebuck Foundation	85,000
Seattle Opera Guild, Inc.	5,000
Board of Trustees of the Second District Dental Society	100
Miss Harriet Segal	7.50
Mr. & Mrs. Solomon Seinberg	10
The Selig Foundation	1,000
Mrs. Germain Seligman	40

Dr. & Mrs. Victor Sendax	$ 1,000
Shapiro Brothers Charitable Foundation, Inc.	100
Mrs. Robert W. Sharp	25
Mr. Jeffrey Shedd	250
The Shelton Health Club	10
Shelter Rock Foundation, Inc.	200
Mr. Samuel G. Shepherd	10
Mr. & Mrs. Edward A. Sherrard	50
Mrs. Veonia W. Shivery	25
Mr. Abram J. Shorin	500
The Shubert Foundation, Inc.	5,000
Ford Shuman Foundation	500
Dr. Irving Shuman & Dr. Henry Adelson	25
Mr. & Mrs. Adrian Siegel	75
Miss Patricia Silber	7.50
Mr. Leon Simon	12.50
Mr. & Mrs. Joseph Simon	15
Sisler-McFawn	5,500
Mr. Mike Sleschinger	10
J. Seymour and Gertrude H. Sloan Foundation, Inc.	500
Mrs. Frances Slocum	25
Smith, Currie & Hancock	1,000
Mr. G. Maynard Smith	1,000
Mr. H. Hamilton Smith	250
Mrs. Helen R. Smith	250
Mr. Oliver Smith	1,000
Mrs. Ted Sneddon	10
Mr. Stanley S. Snellenburg	25
Mr. Raynes L. Soaries, Jr.	5
Society Foundation	1,000
South Brooklyn Savings Bank	100
South Dakota Department of Public Instruction	250
Miss Vivian Spaulding	10
Talbot T. Speer Foundation, Inc.	50
The Girard L. Spencer Family Foundation	26,043
Mrs. Helen P. Spencer	25
Mr. Michael Spielman	10
Mrs. Agnes Squadrito	15
Squibb Corporation	500
Mr. & Mrs. Carl W. Staehlin	25
The Starr Foundation	500
Mrs. Anthony Stedem, Jr.	25
Mr. John H. Steel	400
Ms. Blanche Steinberg	100
Mr. Loran D. Stephenson	7.50
Dr. & Mrs. Stern	10
Miss Bessie C. Stern	30
Stern Brothers & Company	100
Mrs. Edgar B. Stern	1,000
Mr. Roger L. Stevens	3,000
Mr. J. McLain Stewart	900
Mr. & Mrs. Arthur V. Stiffey	500
Mrs. Janet S. Stone	200
Mr. & Mrs. H. H. Stokes	15
Mrs. Claudia Stoop	50
Mrs. Gladys Story	25
Miss Carol D. Strader	25
Mr. John W. Straus	2,000
Mr. Joseph Straus, Jr.	100
Miss Eva S. Stubbs	10

Mr. & Mrs. Jere N. Sullivan	$ 25
The William Matheus Sullivan Musical Foundation, Inc.	2,500
Mr. Alvah W. Sulloway	25
Ms. Barbara Swain	5,000
Mrs. Carey B. Swope	25
Mr. Janos Szanto	50
Mr. Warren B. Syer	550
Mr. & Mrs. Raymond H. Synnestvedt	10
Syntex Scientific Systems	150
Mr. Pasquale Tallarico	50
Mr. Sidney Tannenbaum	100
Mr. Joseph Tarica (Estate of)	1,466.36
Mrs. H. Leary Taylor	25
Teleprompter Corporation	1,000
Herbert A. Templeton Foundation	250
Dr. & Mrs. R. Carmichael Tilghman	50
Mrs. John Tinker	50
Mr. Joe S. Tobias, Jr.	10
Mr. & Mrs. Leonard C. Tobin	5,000
Mr. Nicholas L. Todd	12.50
Mr. & Mrs. Seymour I. Toll	50
Miss Mary Tomkins	10
Calvin & Doreen K. Townsend	1,000
Mr. Phil Traveline	15
Mr. Bernard W. Treister	15
Mrs. Gloria Triffelman	5
Mrs. Nion R. Tucker	982.03
Mr. & Mrs. James B. Tyler	10
Mrs. Alene Fox Uhry	1,500
Mrs. Donald B. Ullfers	15
Union Federal Savings & Loan	500
United Arts Council of Puget Sound	14,000
United States Trust Company of New York	500
Urban Ed, Inc.	200
U. S. Fidelity and Guaranty Company	250
Valley National Bank	200
Mrs. E. W. Van Buren	100
van Loben Sels Charitable Foundation	11,000
Mrs. Roseanne Veiga	25
Vista S. Clair, Inc.	155
Mrs. John Vosskuhler	50
Archie D. and Bertha H. Walker Foundation	1,000
Mrs. Bradford H. Walker	200
Walker Bank & Trust Company	10
Mrs. Patricia Walker	25
Mr. William L. Walker	75
Mr. John A. Wallace	1,000
Mr. & Mrs. Jesse Wallach	25
Trustees of the Walters Art Gallery	29,338
Walton Funeral Home	200
Barbara Warden Foundation	500
Mrs. E. R. Wardwell	100
Albert and Bessie Warner Fund	1,000
Washington Trust Bank	1,000
Mrs. Simon Wasserman	100
Mr. Herbert J. Watt	100
The Paul L. and Phyllis Wattis Foundation	3,000
Waverly Press, Inc.	100
Miss Meta E. Weathersby	10
Mr. Walter Weaver	25

Mr. Daniel Webster	$ 25
Mr. Ormon Weight	800
F. Weiler Charity Fund	50
Dr. & Mrs. E. David Weinberg	100
Mr. Milton Weinstein	1,000
Mrs. C. Newbold Welsh	100
Dr. & Mrs. Robert E. Wells	250
Dr. Dennis K. Wentz	1,000
Western Electric Fund	1,000
Mrs. Shirle N. Westwater	8,750
Mrs. Lilliam W. White	50
Mrs. Thomas Raeburn White	250
Ms. Sally W. Whitely	65
The Whiting-Turner Contracting Company	250
The William C. Whitney Foundation	1,000
Whitman, Requardt & Assoc.	100
Willamette Industries, Inc.	155
Myron A. Williams	200
Mr. Robert S. Williams	10
Mr. Rodney W. Williams	500
Mrs. S. H. Williams, Jr.	25
The Williamsburgh Savings Bank	100
Mr. Gerard R. Willse, Jr.	500
Mrs. Charles B. Wilson	25
Mr. Kenneth O. Wilson	50
Mr. & Mrs. Richard M. Wilson	25
Ms. Anne Winslow	100
Mrs. Harrison L. Winter	2,053.57
Miss E. Kelroy Wode	25
Mr. & Mrs. Ben Wolf	100
Mr. Edwin Wolf	150
Mr. Howard A. Wolf	100
Mrs. Theodore J. Wolfe	50
Mr. & Mrs. Abel Wolman	25
Women's Association Minnesota "WAMSO"	890
Women's Board of the Peabody Institute	1,000
The Women's Committee of the Cleveland Institute of Music	12,450
Mr. Robert M. Wood	538.48
Woods Charitable Fund, Inc.	15,000
Wyomissing Foundation, Inc.	3,000
Mr. & Mrs. Sidney A. Yasgur	400
Miss Frances D. Young	500
Judge and Mrs. Joseph H. Young	25
Mrs. Robert Zandman	25
Zapf's Music Store, Inc.	25
J. D. Zellerbach	5,000
Harold and Doris Zellerbach Fund	32,000
Dr. & Mrs. Dewey K. Ziegler	100
Mrs. Ididor Ziegler	30
Zions First National Bank	25
Zoecon Corporation	25
Mr. Louis Zweig	25
Anonymous (40)	535,722.15
TOTAL	$3,500,000.00

NATIONAL ENDOWMENT FOR THE ARTS

SUMMARY OF OBLIGATIONS BY OBJECTIVE

		FY 73 Actual Amount	%	FY 74 Estimated Amount	%	FY 75 Requested Amount	%
1.	Availability of the Arts	$17,627,408	42.9	$25,980,767	49.2	$35,115,000	50.5
2.	Cultural Resources Development	13,206,563	32.1	12,811,819	24.2	14,300,000	20.6
3.	Advancement of our Cultural Legacy	10,271,340	25.0	14,047,786	26.6	20,125,000	28.9
	S U B - T O T A L S	41,105,311	100.0	52,840,372	100.0	69,540,000	100.0
4.	Program Development and Evaluation	897,720	---	1,823,250	---	2,460,000	---
5.	Miscellaneous	27,967		-		-	
6.	Gifts, Donations, and Matching Funds	1/	---	14,613,613 2/	---	20,000,000	---
	T O T A L S	$42,030,998		$69,277,235 2/		$92,000,000	

1/ Gifts, donations, and matching funds have been distributed by objective.

2/ Includes funds carried over from Fiscal 1973.

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NATIONAL ENDOWMENT FOR THE ARTS
SUMMARY OF OBLIGATIONS BY PROGRAM AREA

Program Area	FISCAL 1972[1] Actual	%	FISCAL 1973[1] Actual	%	FISCAL 1974[2] Estimate	%
Architecture + Environmental Arts	$ 785,162	(2.4)	$ 1,563,921	(3.8)	$ 2,680,000	(5.1)
Dance	2,267,741	(7.0)	2,759,010	(6.7)	3,835,833	(7.3)
Education	1,750,736	(5.4)	2,529,970	(6.2)	3,285,250	(6.2)
Expansion Arts	1,137,088	(3.5)	2,524,556	(6.1)	4,025,000	(7.6)
Federal-State	5,476,020	(17.0)	6,871,250	(16.7)	10,895,209	(20.6)
Folk Arts[3]	-0-[3]		-0-[3]		500,000	(1.0)
Literature	636,050	(2.0)	774,789	(1.9)	1,297,000	(2.5)
Museums	4,149,273	(12.9)	4,615,041	(11.2)	6,249,841	(11.8)
Music	9,745,797	(30.2)	10,382,210	(25.3)	7,419,169	(14.0)
Public Media	1,979,877	(6.1)	2,766,558	(6.7)	3,622,000	(6.9)
Special Projects	656,228	(2.0)	1,002,308	(2.4)	1,026,320	(1.9)
Theatre	2,696,000	(8.4)	3,335,122	(8.1)	4,194,750	(7.9)
Visual Arts	940,505	(2.9)	1,980,576	(4.8)	2,435,000	(4.6)
Arts in Depth	-0-		-0-		1,000,000	(1.9)
Other Touring	-0-		-0-		200,000	(0.4)
Research	-0-		-0-		175,000	(0.3)
SUBTOTAL	$ 32,220,477	(99.8)	$ 41,105,311	(99.9)	$ 52,840,372	(100.0)
Miscellaneous	280		27,967		-	
Program Development and Evaluation	882,278		897,720		1,823,250	
TOTAL	$ 33,103,035[1]		$ 42,030,998[1]		$ 54,663,622[2]	

1/ Includes Treasury Funds (gifts and matching) distributed by program area.

2/ Does not include Treasury Funds.

3/ Distributed among other Endowment programs; in addition, a separate area beginning in 1974.

NATIONAL ENDOWMENT FOR THE ARTS

SUMMARY OF OBLIGATIONS BY STATE, REGIONAL AND NATIONAL

	FY 71		FY 72		FY 73	
	No.	Amount	No.	Amount	No.	Amount
Regional and National*	45	$ 3,365,430	101	$ 5,803,874	123	$ 7,488,765
By State	654	14,274,705	1442	27,299,161	2020	34,542,293
TOTALS	699	$17,640,135	1543	$33,103,035	2143	$42,031,058**

* Certain programs affect the entire nation, or portions thereof, and cannot be "credited" to any particular State.

** $60 unreconciled.

NATIONAL ENDOWMENT FOR THE ARTS

OBLIGATIONS BY STATE

	FY 71		FY 72		FY 73	
	No.	Amount	No.	Amount	No.	Amount
Alabama	11	$ 144,357	12	$ 218,959	18	$ 266,151
Alaska	5	98,877	11	217,246	13	282,832
Arizona	7	143,377	24	247,430	21	286,963
Arkansas	2	85,377	6	133,320	6	178,930
California	58	1,112,027	128	2,537,377	249	3,494,709
Colorado	12	238,987	20	538,810	28	548,506
Connecticut	18	342,177	40	687,423	44	702,917
Delaware	2	79,377	9	151,200	8	316,780
Florida	9	200,477	18	257,158	33	486,368
Georgia	9	203,577	17	413,795	21	380,425
Hawaii	3	97,577	10	241,951	11	319,158
Idaho	1	75,377	4	117,320	7	157,697
Illinois	18	348,377	59	1,301,870	79	1,155,425
Indiana	12	190,482	17	284,378	18	286,880
Iowa	7	104,793	12	178,082	31	355,177
Kansas	7	113,077	11	166,520	17	236,809
Kentucky	7	165,377	9	210,436	17	413,317

NATIONAL ENDOWMENT FOR THE ARTS

OBLIGATIONS BY STATE

	FY 71		FY 72		FY 73	
	No.	Amount	No.	Amount	No.	Amount
Louisiana	13	190,802	19	413,133	30	452,412
Maine	6	143,577	13	271,491	14	299,641
Maryland	13	298,227	30	556,258	38	901,300
Massachusetts	34	437,127	67	1,112,341	99	1,687,509
Michigan	17	488,467	32	466,723	44	753,081
Minnesota	19	579,382	32	885,559	35	1,118,036
Mississippi	6	125,657	14	204,850	9	195,030
Missouri	9	510,377	29	685,622	34	711,804
Montana	4	165,877	8	138,665	9	177,990
Nebraska	4	110,792	11	429,401	15	325,567
Nevada	1	75,377	6	140,875	9	206,412
New Hampshire	5	155,668	13	202,369	13	196,282
New Jersey	9	166,677	24	346,305	43	503,049
New Mexico	10	287,727	18	313,620	31	483,171
New York	125	1,880,625	285	4,599,882	456	6,669,299
North Carolina	12	191,847	19	251,209	25	416,643
North Dakota	2	77,377	6	126,920	10	178,720

NATIONAL ENDOWMENT FOR THE ARTS

OBLIGATIONS BY STATE

	FY 71		FY 72		FY 73	
	No.	Amount	No.	Amount	No.	Amount
Ohio	19	$ 473,240	53	$ 1,228,474	66	$ 1,203,730
Oklahoma	7	149,277	11	236,835	14	284,620
Oregon	7	133,577	17	314,769	18	389,228
Pennsylvania	18	251,217	38	736,553	75	1,022,065
Rhode Island	6	227,017	10	226,003	16	419,498
South Carolina	2	87,577	9	213,520	10	245,669
South Dakota	5	89,877	5	129,470	9	163,503
Tennessee	9	158,877	24	306,541	24	343,500
Texas	18	331,534	53	1,055,340	66	1,244,850
Utah	7	274,527	19	366,493	15	310,920
Vermont	7	118,417	12	183,465	13	215,607
Virginia	8	133,777	24	240,230	33	366,171
Washington	16	428,177	30	669,001	30	738,356
West Virginia	4	142,577	11	169,618	10	207,700
Wisconsin	10	172,077	20	331,190	22	396,938
Wyoming	3	81,877	7	144,440	8	179,390
American Samoa	1	14,500	2	77,080	2	77,200

NATIONAL ENDOWMENT FOR THE ARTS

OBLIGATIONS BY STATE

	FY 71		FY 72		FY 73	
	No.	Amount	No.	Amount	No.	Amount
District of Columbia	27	$ 1,173,076	56	$ 1,311,801	44	$ 1,190,691
Guam	1	53,500	2	54,700	1	65,000
Puerto Rico	1	75,377	2	126,320	4	172,250
Virgin Islands	1	75,377	4	128,820	5	160,417
TOTALS	654	$14,274,705	1442	$27,299,161	2143	$34,542,293

NATIONAL ENDOWMENT FOR THE ARTS

REGIONAL AND NATIONAL PROJECTS

FY 1971

Affiliate Artists, Inc.	$ 280,300
America the Beautiful Fund of the Natural Area Council	25,000
American Association of Museums	18,800
American Educational Theatre Association/ University Resident Theatre Association	25,000
The American Federation of Arts	50,000
The American Film Institute	1,086,875
American Musical Digest	8,750
American National Theatre and Academy	56,082
American Society of Landscape Architects Foundation	10,000
American Symphony Orchestra League	79,000
Artists' Technical Research Institute	10,000
Associated Councils of the Arts	125,000
Association of American Dance Companies	25,000
Brooklyn College (Theatre artisan training)	70,000
Center for Understanding Media (Artists-in-Schools)	62,508
Chimera Foundation for Dance (Film production)	24,900
College Entrance Examination Board	125,000
Coordinating Council of Literary Magazines	50,000
Corporation for Public Broadcasting	40,000
Cultural Council Foundation/Teachers and Writers Collaborative	10,000
Dance Notation Bureau	35,000
Educational Broadcasting Corporation	3,750
Film Culture Non-Profit Corporation/Filmmaker's Cinematheque	9,800
Foundation for American Dance/City Center Joffrey Ballet (Tour)	250,000
Martha Graham Center of Contemporary Dance (Tour)	50,000
International Theatre Institute, U.S. Centre	35,000
The Jargon Society	45,000
National Association for Regional Ballet	19,240
National Folk Festival Association	25,000
National Guild of Community Music Schools	17,500
New York State Historical Association (Regional Conservation Center)	41,500
New York University Regional Conservation Center	40,000
O.P.E.R.A. America/Baltimore Opera Company	15,000
Pan American Development Foundation/Inter-American Music Festival)	20,000
The Paper Bag Players (Tour)	20,000
P.E.N. American Center	39,000
Young Audiences, Inc.	196,950
Young Concert Artists, Inc.	15,000
Program Development and Evaluation	305,475
FY 1971 Total	$3,365,430

Regional and National Projects - 1972

FY 1972

Affiliate Artists, Inc.	$ 240,000
America the Beautiful Fund of the Natural Area Council	30,000
American Association of Junior Colleges	2,250
American Association of Museums	84,930
The American Federation of Arts	55,300
The American Film Institute	1,037,500
The American Film Institute (Film Preservation)	300,000
The American Film Institute (National Association of Media Educators)	40,000
The American Museum of Natural History (Museum Training)	77,483
The American Society of Landscape Architects Foundation	10,000
American Symphony Orchestra League	90,000
American Theatre Association, Inc.	1,488
American National Theatre and Academy	270,000
American Theatre Association, Inc./University Resident Theatre Association	16,000
American Youth Performs Foundation, Inc.	20,000
Artists Equity Fund	2,500
Associated Councils of the Arts	59,500
Associated Writing Programs	10,000
Association of American Dance Companies	25,000
Ballet Theatre Foundation, Inc./American Ballet Theatre (Tour)	150,000
Black Academy of Arts and Letters, Inc.	20,000
Boston Architectural Center (Fellowships)	25,000
Brooklyn College of the City University of New York (Theatre artisan training)	70,000
Carnegie Hall Corporation (Recordings for National Public Radio)	12,500
Center for Understanding Media (Artists-in-Schools)	104,760
Center for Understanding Media	25,000
Central Midwestern Regional Educational Laboratory, Inc. (CEMREL)	2,000
City Center of Music and Drama, Inc./New York City Ballet (Tour)	40,134
City Street Theatre Ensemble, Inc. (Tour)	10,000
College Entrance Examination Board	75,000
Columbia University in the City of New York (Translation Program)	42,790
Coordinating Council of Literary Magazines	170,000
Corporation for Public Broadcasting	15,028
Cultural Council Foundation (Film)	7,500
Educational Broadcasting Corporation/NET Division	75,000
Educational Facilities Laboratory, Inc.	23,550
Educational Film Library Association, Inc.	24,270
Foundation for American Dance, Inc./City Center Joffrey Ballet (Tour)	135,750
Foundation for Interior Design Education Research	10,000
Foundation for the Community of Artists	4,000
The Foundation for the Extension & Development of the American Professional Theatre, Inc.	10,000
Martha Graham Center of Contemporary Dance (Apprentice Program)	40,000
Industrial Designers Society of America, Inc.	30,010
The Institute for Architecture and Urban Studies	16,000
The Institute of Paper Chemistry	7,635
Intermuseum Conservation Association	4,875

Regional and National Projects - 1972 (Cont.)

International Center of Theatre Creation, Inc.	$ 60,000
International Exhibitions Foundation	10,000
International Film Seminars, Inc.	10,000
International Theatre Institute of the United States, Inc.	45,000
The Metropolitan Museum of Art (Study on Museum Education)	5,000
Modern Organization for Dance Evolvement, Inc.	14,900
The Museum of Modern Art (Film)	3,000
Music Critics Association Educational Activities, Inc.	10,000
National Association for Regional Ballet	48,562
National Choral Foundation, Inc.	7,500
National Folk Festival Association	25,000
National Guild of Community Music Schools, Inc.	17,500
National Mexican American Anti-Defamation Committee, Inc./"La Camera Grafica"	15,000
The National Opera Institute	350,000
National Public Radio, Inc.	7,200
National Recreation and Park Association	15,700
National Trust for Historic Preservation	12,000
National Urban Coalition	15,000
New York Pro Musica Antiqua, Inc. (Tour)	25,000
New York State Council on Architecture	43,252
New York State Historical Association (Conservation Training)	60,375
New York University/Conservation Center of the Institute of Fine Arts	50,000
The Paper Bag Players (Tour)	30,000
Peabody Institute of the City of Baltimore/Council of Independent Professional Schools of Music	16,500
P.E.N. American Center	45,856
Performing Arts Repertory Theatre Foundation, Inc.	10,000
Susan Phelps (Museum Posters)	1,100
Private Arts Foundation of Washington (Conference for Women in the Arts)	2,000
Puerto Rican Forum, Inc./Institute of Contemporary Hispanic Art	5,000
Research Foundation of State University of New York/ National Center of the International Association of Theatres for Children and Youth	25,000
Sculpture in the Environment, Inc. (SITE)	10,000
Theatre Development Fund, Inc.	50,000
The Thorne Music Fund	30,000
Union of Independent Colleges of Art, Inc.	24,000
United States Institute for Theatre Technology	8,000
Volunteer Lawyers for the Arts	20,000
Whitney Museum of American Art (Fellowships)	5,000
Young Audiences, Inc.	251,118
Young Concert Artists, Inc.	15,000
Miscellaneous	280
Program Development and Evaluation	882,278
FY 1972 Total	$5,803,874

Regional and National Projects - 1973

FY 1973

Affiliate Artists, Inc.	$ 170,000
AFL-CIO Labor Studies Center, Inc.	9,750
America the Beautiful Fund of the Natural Area Council	60,000
American Association for State and Local History	9,940
American Association for the Advancement of Science	2,500
American Association of Museums	43,633
American Crafts Council	4,500
American Educational Theatre Association, Inc.	38,000
American Educational Theatre Association, Inc./University Resident Theatre Association	10,000
The American Federation of Arts	103,170
The American Federation of Arts/International Design Conference	7,500
The American Film Institute	1,100,000
The American Film Institute (Film Preservation - contract)	390,000
The American Film Institute (Filmmaker grants - contract)	260,000
American Institute of Architects Research Corporation (Publication)	10,000
American National Theatre and Academy	250,000
American Symphony Orchestra League	24,000
Art Information Center, Inc.	1,500
Associated Councils of the Arts	138,850
Associated Councils of the Arts (Survey)	82,609
Associated Writing Programs	28,890
Association for the Study of Man-Environment Relations, Inc.	9,050
Association of American Dance Companies	57,500
Association of College and University Concert Managers	20,000
Association of Collegiate Schools of Architecture	25,000
Ballet Theatre Foundation, Inc./American Ballet Theatre (Tour)	176,250
The Center for Understanding Media, Inc.	110,000
Ivan Chermayeff (Federal Design Assembly)	46,000
City Center of Music and Drama, Inc./New York City Ballet (Tour)	69,390
City Center of Music and Drama, Inc. (Artists-in-Schools)	50,000
Colorado Foundation on the Arts and Humanities (Regional Coordinator)	37,500
The Trustees of Columbia University (International Film Festival)	9,500
The Committee for the Visual Arts, Inc.	5,000
Coordinating Council of Literary Magazines	250,000
Corporation for Public Broadcasting	15,000
Lois A. Craig (Federal Architecture Guidelines)	114,000
Dance Notation Bureau, Inc.	35,000
Educational Broadcasting Corporation	113,500
Educational Facilities Laboratories, Inc.	23,550
Film Art Fund, Inc.	32,000
Foundation for American Dance, Inc./City Center Joffrey Ballet (Tour)	105,456
Foundation for the Community of Artists, Inc.	12,000
Foundation for Dramatic Radio, Inc.	10,000
Foundation for Interior Design Education Research	10,000
Hospital Audiences, Inc.	30,000
Howard University (Conference)	5,000
Institutional Development & Economic Affairs Service, Inc. (Film)	17,400

International Exhibitions Foundation	$ 19,150
International Film Seminars, Inc.	35,000
International Theatre Institute of the United States, Inc.	55,000
The Jargon Society (Small Press Distribution)	50,719
The Library of Congress	1,080
Massachusetts Institute of Technology (Arts and Technology Planning Group)	10,000
Media Study Incorporated (Film)	8,000
Museum Education Roundtable	10,000
Music Critics Association Educational Activities, Inc. (Music Critics Institute)	32,800
National Association for Regional Ballet	57,805
National Association of Media Educators	40,000
National Council on the Aging	25,000
National Folk Festival Association	7,500
National Gallery of Art	11,000
National Guild of Community Music Schools, Inc.	62,500
The National Opera Institute	700,000
National Recreation and Park Association, Inc.	49,350
The University of Nebraska Foundation (Mid-America Regional Arts Council)	30,000
The New Theatre Workshop, Inc./City Center Acting Company (Tour)	65,000
New York Foundation for the Arts, Inc. (Artists-in-Schools)	119,000
New York Performance Foundation, Inc. (Publication)	9,770
New York State Historical Association (Conservation Training)	61,525
Open Channel, Inc. (Video Programs)	5,000
O.P.E.R.A. America	15,000
Opportunity Resources for the Performing Arts, Inc.	15,000
The Paper Bag Players (Tour)	35,000
Peabody Institute of the City of Baltimore/Association of Independent Colleges of Music	18,500
P.E.N. (Poets, Playwrights, Essayists, Editors and Novelists) American Center	41,000
Performing Arts Repertory Theatre Foundation, Inc. (Tour)	15,000
Poets and Writers, Inc.	22,500
Research Foundation of the City University of New York/ Brooklyn College (Theatre Artisan Training)	70,000
The Research Foundation of the State University of New York (Conference)	3,800
Rocky Mountain Arts and Humanities Foundation	150,000
Smithsonian Institution	6,169
Society for Industrial Archeology	9,000
Southern Growth Policies Board (Regional Coordinator)	37,500
Teachers and Writers Collaborative, Inc.	10,000
Theatre, Inc./Phoenix Theatre (Tour)	75,000
Theatre Communications Group, Inc.	10,000
United Church Board for Homeland Ministries	5,000
University of Utah (Conference)	9,060
Volunteer Lawyers for the Arts	20,000
Western Association of Art Museums	30,711
Whitney Museum of American Art (Fellowships)	10,000
Richard Saul Wurman (Federal Design Assembly)	82,750
Young Audiences, Inc.	250,000
Young Concert Artists, Inc.	30,000
Miscellaneous	21,918
Program Development and Evaluation	897,720
FY 1973 Total	$7,488,765

NATIONAL ENDOWMENT FOR THE HUMANITIES

I. SUMMARY STATEMENT: THE ENDOWMENT IN FY 1975

Introduction: The Dimensions of the Budget

The budget for fiscal year 1975 proposes $72 million in definite appropriations and $10 million in indefinite funds to match gifts generated from private or non-Federal sources. This represents an increase of $31 million over appropriations for the present fiscal year, yet still falls below the currently authorized level and the optimum funding requirements as estimated at the time of the Endowment's reauthorization four years ago. The requested funds appear especially modest when measured against the variety of programs which the Endowment conducts and the vast number of citizens whom those programs increasingly serve; for funds from the Endowment for the Humanities are now broadly spread among a large number of agencies, organizations, institutions, and individuals.

This wide audience did not exist eight years ago when the Endowment was created. Indeed, while it continues to serve the traditional humanities constituency comprising the university and the scholar, the maturing status of the Endowment has meant a growing perception of the needs of its full constituency, the American people. This full constituency includes organizations concerned with the communication of knowledge--like libraries, museums, the media--and the various population groups not routinely involved in the humanities --the two-year college vocational student, the rural small town resident, the young person, the adult citizen whether housewife, blue-collar worker, or practicing professional. Efforts to identify these constituents and develop effective ways of bringing the humanities to them have been guided by the legislative mandate which makes clear that the NEH mission is not that of a solitary agency, but to be a part of the Federal government's coordinated ventures in cultural and humanistic progress: the Federal role is complementary to and supportive of that of other government and private sectors. Accordingly the agency's perspective required it to assist and guide experiments, innovations, and traditional programs in the humanities by working with the structures that transmit humanistic knowledge. These structures have been numerous as well as diverse; their supported activities varied and many; their effects, cumulatively, profound.

Reach of the Endowment

During the 12-month period ending June 30, 1973, the Endowment received 5,237 applications, requesting $167.3 million. Because of limited funds, actual grants numbered only 1,256 and totalled $40.4 million. Yet these grants aided individuals and institutions in all 50 states, the District of Columbia, and Puerto Rico. While only a small proportion of the total eligible universe of educational, cultural, and civic institutions could be aided, nevertheless, Endowment funds had a wide and continuing impact:

--By the end of this fiscal year every state of the union will have a functioning State-based humanities program. These programs, fully operational in 22 states last year, directly reached more than one million adults, involving them and professional humanists in active and thoughtful examination of critical public issues of concern to their states.

--Humanities Film Forum, the Endowment's first public television series, was seen by 30 million Americans, the fourth largest audience ever to watch a public television series in this country; and the nine-part version of War and Peace in one large city alone attracted viewers from 1,000,000 households. (Complete figures presently unavailable)

--The NEH-supported Soviet Art exhibition during its six-city tour of the United States attracted nearly one million visitors.

--The number of individuals in small towns receiving the "National Humanities Series" presentations from NEH-funded Program Development Centers, first established in 1969, passed the one million mark in 1973.

--Beginning last September and continuing for 20 weeks, 240 American newspapers have published the first "Course by Newspaper," bringing humanistic knowledge to more than 20 million persons and providing them, incidentally, with a new way in which to earn college credit.

--Over 100 colleges and universities were aided in strengthening their instructional programs in the humanities.

--The 1,079th small college received the BBC Civilisation series for showings to its students and its community, bringing to over one million the total number of citizens who have profited from this remarkable presentation.

--Nearly 1,000 individual scholars and teachers received support for projects designed to increase the Nation's stock of humanistic knowledge.

--The second Jefferson Lecture presented by one of the nation's foremost scholars, Erik Erikson, was broadcast to a vast listening audience of public radio simultaneous with its delivery before a distinguished assembly in the nation's capital, providing thousands of persons with an opportunity to experience the application of humanistic insight to public affairs.

--Responding to the growing concerns about the ethical and value implications of developments in science and technology, the Endowment launched a new program to encourage humanists and scientists to examine particularly the issues resulting from current medical and biological research, and directed $1 million to this end.

--Public and academic libraries across the nation received over $5 million to support a range of activities including cooperative ventures with local schools, improved facilities for humanistic research, a computerized bibliographic network serving many small colleges, and expanded holdings on Black history and modern China.

--For the fourth straight year the offer of private gifts to the Endowment exceeded the limit of the agency's matching authority; particularly noteworthy among the $4.3 million in gifts was the $1.5 million raised by New York citizens and organizations, matching two-to-one a $750,000 NEH challenge grant, to keep available for the public's use the incomparable research facilities of the New York Public Library.

The Need for Humanistic Knowledge

The Endowment's authorizing legislation outlines the framework within which NEH programs are formulated:

> that democracy demands wisdom and vision in its citizens and that it must therefore foster and support a form of education designed to make men masters of their technology and not its unthinking servant.

This calls for a humanistic education producing knowledge which will help every citizen achieve, as the act also specifies, "a better understanding of the past, a better analysis of the present, and a better view of the future."

And with the increased funding available during the past three years, the Endowment has been able to make this kind of knowledge available to an ever-increasing part of our population. The importance of this knowledge is, in turn, more and more recognized by our citizens as they seek--

--to find meaning and purpose in a world of increasing complexity and declining institutional authority;

--to grapple with the ethical questions raised by scientific discoveries and impersonal bureaucratic life;

--to confront the "energy," "pollution," and other economic crises threatening the material conditions and accustomed styles of living;

--to order and resolve these problems and the inevitable value conflicts arising in a pluralistic society; and

--to determine the priorities for a nation approaching its third century.

Endowment programs, although individually justified and discretely administered, have as a unifying, integrating purpose the provision of this humanistic knowledge to the American citizenry, thus:

--The Endowment's Research Grants Program concerns itself with the production of knowledge -- the discovery of new knowledge and the reorganization of knowledge in the light of new needs and new understandings.

--The Fellowship Programs assist the development of people -- the human resources -- responsible for the discovery and transmission of knowledge.

--The Education Programs enable the transmission of knowledge from generation to generation through institutions and programs of formal education.

--The Public Programs seek to increase the use of humanistic knowledge by the adult public to enable a broader understanding of the origin of our values, the development of our culture, and the background of critical public issues.

Despite the growing feeling that the great questions of our day are humanistic rather than scientific, however, the humanities continue to claim a very small proportion of the Federal or national support for knowledge production and dissemination. Beside the annual $17 billion allocated by the Federal government for scientific and technological research and development, the $82 million requested for the humanities is small indeed. The effect of this minimal support to the humanities can be seen in various aspects of our educational system and the broader society, indicating the scope of the need for NEH funds:

--While the new math and new physics have swept the nation's school systems, the teaching of English, history, and the other humanities subjects shows little change from pre-World War II days: the foundation upon which firm societal values must be built is no longer secure.

--While most colleges and universities have raised the academic level and effectiveness of their science departments, few institutions have been able to effect similar improvement in their humanities departments.

--In 1972 four states reported that no humanities doctorates were awarded in their entire state while all reported the awarding of science doctorates; and beginning salaries of new science B.A. degree holders continue to average 25 percent above their counterparts with humanities degrees.

--Less than two percent of programing on commercial television is in the humanities, and American-produced programs are almost nonexistent; even on public television the few hours devoted to the humanities cannot begin to compare with British-produced programs.

--Less than 20 percent of full-time personnel employed by state and local historical agencies, according to a 1970 study, are professionally trained for their jobs.

--Rising operational costs, growing deficits, and aging plants have made imaginative educational exhibits (as opposed to simple displays), especially those drawing materials from foreign countries, increasingly difficult for museums to mount, and at a time when public demand (as manifested in the thousands of visitors thronging the Soviet art exhibition) is increasing.

--The demand for State-based program funds by local organizations wishing to conduct public forums on critical issues is nearly double the amount granted: Had additional funding been available in the eight states with the most advanced programs, for example, 150,000 more persons could have participated in discussions with professional humanists and could thereby have broadened their understanding of issues confronting them as citizens and public policy makers.

--This nation has never had a comprehensive series of regional and state histories combining sound scholarship and general reader appeal which the Victorian County Histories constitute in Great Britain; and state and local archives, whose resources are essential for developing such works, are disorganized and poorly maintained.

--Public libraries, especially in the large urgan areas, find themselves at the bottom of local government priority, unable to

develop new programs necessary to turn their facilities into community education centers serving their whole population.

--Last year specialist reviewers recommended over $80 million in NEH grants; only half this amount was available for awards. The gap between grants requested and grants awarded will increase this fiscal year to an estimated $175 million, and -- even should the current request be approved -- to over $200 million in FY 1975.

Emphases for 1975

1. Focused Activity. During its first six years, the Endowment, in making its grants, responded almost wholly to unsolicited applications without specifically inviting applicants to focus their talents upon carefully determined priority areas. This was deemed appropriate by the National Council, indeed necessary, in view of the conditions of those early years: lack of models for effective public programs, the fear of Federal control, the need for experimentation, the great accumulation of program ideas and projects during the many years when no Federal money was available for the humanities. Moreover, as a national foundation with a broad mission, the agency was expected to support a variety of locally initiated efforts. The period 1966-71, accordingly, saw a wide range of diverse activities funded in order to determine the extent of the needs in the humanities, to encourage fresh approaches, and to test out suitable programs. As experience was gained, the Endowment moved first to give greater definition to its general grant programs and, increasingly, to establish specific programs directed at recognized needs. Thus the National Humanities Faculty was created, then the National Humanities Series, and most recently the State-based programs. The Endowment must remain open always to unsolicited applications and, by definition, its operation will consist in competitive grantmaking but each division of the agency will in 1975 actively encourage humanists to direct their attention to certain kinds of activities and certain subject areas:

--The Public Programs will attempt to bring humanities scholars and outstanding TV and film production experts together in "program centers" to produce high quality programs in the humanities for broadcast over public stations and subsequent public distribution.

--The Education Programs will encourage, in keeping with the Bicentennial, the development of new American Studies curricula at the high school and college levels and will set up interdisciplinary institutes for the training of humanities teacher-scholars.

--The Fellowship Programs will be restructured away from a primary emphasis on independent study toward programs of guided study at major universities for faculty from community and small four-year colleges; and to programs of collegial research by distinguished scholars.

--The Research Grants Program will move from small individual research activities to support for (1) major resource and reference projects and (2) the preparation of state and regional histories and archives.

--The Office of Planning will continue to seek and fund projects oriented to non-traditional study and to specific groups in the population not normally served by the humanities.

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As an extension of this focused activity, another Endowment policy decision implemented in 1974 with implications for 1975, concerns a more systematic attempt to develop certain cultural institutions --such as museums and libraries (including public, school, college, and independent research libraries) -- into centers for community education in the humanities. The resources (books, films, paintings, art works) of these institutions have, of course, always constituted the core of the nation's stock of humanistic material. Traditionally, however, they have been simply raw materials available should they be needed either for independent research or temporary exhibitions or special events hosted by the institution. Beginning this year, the Endowment will solicit a selected number of these institutions who wish to redefine their traditional functions by organizing their resources, supplementing these with outside instructional resources, and providing formal and informal humanistic education programs for the residents of their areas. Operational tests entailing informal participation of the general adult public will be undertaken within the Museum and Special Projects programs; those exploring non-traditional methods and loci for formal education will be undertaken within the recently established Cultural Institutions activity of the Education Program.

2. Public Programs. The basic strength of the humanities has depended and will, of necessity, continue to depend on scholars and teachers in our colleges and universities, for it is in these institutions that the essential materials on man's collective experience are maintained, that knowledge about this experience is produced and transmitted to our young people, and that the skills and insights associated with the humanities are acquired by each new generation of professional humanists. Nevertheless, the unique mission of the Endowment, as reflected in recommendations of the National Council on the Humanities and urged by the congressional committees exercising oversight of the agency, is to promote the dissemination and use of humanistic knowledge among the general public. Movement toward this objective has been reflected in the Endowment's annual budget: in 1973 the NEH Public Programs claimed 31 percent of actual definite funding; in 1974 they will account for an estimated 39 percent; and in 1975 they are planned to comprise nearly 43 percent of regular program funds. This allocation will be used for film and television programs, for museum exhibits, for traveling humanities teams, and for the many projects conducted by local community organizations to effect a direct impact on the broad mass of American citizens. Nor will this public orientation be confined to the formal "Public Programs" activity next year. All parts of the Endowment will supplement and complement the direct formal activity: The Research Grants program will support the preparation of popular state history guides designed for the general reader; the Education Program will support educational activities in public libraries and other community institutions more readily accessible than campuses to all citizens; and the Fellowships and Youthgrants programs will provide extended study opportunities for non-academic individuals. Through these means the Endowment will be energetically pursuing its mission to make the humanities a vital, meaningful force in the lives of all Americans.

Fiscal 1975 expansions in the Endowment's Public Programs will have three major thrusts:

a. State-based Programs. Carefully developed since 1971, State-based humanities program groups under direct Endowment sponsorship will operate in all 50 states by the end of this year. Bringing

together thousands of citizens, scholars, and leaders of educational, cultural and civic organizations throughout the state in discussions of important public policy issues, these programs are demonstrating both the practical application of humanistic knowledge and the possibility of rational dialogue among individuals of diverse interests and background. The FY 1975 request will permit, as an integral part of the Endowment's Bicentennial efforts, fully operational, regranting programs in all 50 states and 5 territories with up to two million adults directly participating and another five million persons reached through television and radio. ($15 million)

b. Media Programs. As the only public agency specifically concerned with humanities programming on public television, the Endowment places the highest priority on developing its support to this medium, along with some small-scale efforts in the field of public radio during the next two years. These mass media will play an important role in NEH efforts to make the Bicentennial period a time for serious reflection about the American experience and the course of our society. The objective in FY 1975 is to support the production of 1-2 hours each week of humanities programming directed at the general adult public and to stress and strengthen the humanities-oriented production capability in the United States. ($6 million)

c. Museum Programs. Although the Endowment's efforts to support truly instructive exhibitions are creating some impact, museums remain in some respects the most ill-used of the nation's humanities institutions. To reach more cogently the millions of persons who visit museums and historical societies each week, the exhibition program of the Endowment designs to support in FY 1975 10-15 major traveling presentations, five small museum exhibits, planning for 20 other exhibition projects, and training programs to increase the supply of skilled museum personnel. ($5 million)

3. The Bicentennial. An overriding purpose of the Endowment during the next two years will be to promote a thoughtful examination and discussion of the origins, development, and the future of the American nation. This thrust does not represent a new or experimental mission for the agency, but rather a highly appropriate reinforcement of the very purposes for which the Endowment was created in 1965 and which the agency has energetically pursued during the seven years of its operating life. The difference between past efforts and those to be undertaken this and next year is that the assurance of additional funding will enable the agency to identify for the nation specific activities appropriate to a serious commemoration of the Bicentennial, and to help develop and precisely focus such activities within its programs.

In the present year, FY 1974, the Endowment is allocating $10 million to such activities. The FY 1975 request projects $25 million, over one-third of the requested definite funding, for these purposes. These sums reflect the keen desire of the Endowment to have in place by 1976 a variety of activities which will involve the total population in informed dialogue on the past and present direction of our society. To accomplish this aim the Endowment will enlist in every region of the land the participation of educational institutions, libraries, museums, historical societies, public television, scholarly associations, research centers, film producers, and civic and community organizations in the development of the following kinds of meaningful programs:

--For the general public, a broad range of media activity including film and television programs comprising serializations of major works by great American writers, documentaries on the birth of the nation, and biographies of its early statesmen; traveling museum exhibitions (Perspectives on America), tracing the nation's evolution and illustrating the modes of life for Americans of different origins and background; special "Courses by Newspaper" using the daily newspaper to inform millions of newspaper readers about the important influences which have shaped American society; and a series of popular state histories, one for each state, which will help laymen, including the many foreign visitors expected in 1976, to relate much-neglected local and state history to the broader sweep of our national history.

--For the adult Americans, the State-based programs will be focused in each of the 50 states on broad Bicentennial themes to encourage several million citizens to examine the background of important public policy questions requiring resolution in the 1970's.

--Paralleling the State-based activity, the National Bicentennial Youth Debate will be organized in FY 1975 to assure participation the following year of 100,000 young Americans in active study and public discussion about the continuing relevance of principles which moved their forebears two hundred years ago.

--The National Humanities Series will ensure that residents in small towns in every state see live presentations by experts on American history and engage in subsequent dialogue with them about the nation's origins and evolution; while persons living in major metropolitan centers will have an opportunity to explore in community forums the great ideas, issues, and traditions which have comprised and shaped the American experience.

--Supplementing the above activities schools, colleges, and universities will be aided in establishing revitalized American history and American Studies Programs in order to assure that these institutions will offer students beyond 1976 the up-to-date, imaginative and intellectually stimulating teaching which these subjects (and the nation) require.

--Undergirding these public and educational programs, and looking to their long-term vitality and relevance, will be a range of scholarly projects which will ultimately benefit all Americans interested in their history: editing of the papers of great statesmen, like Washington; preparation of complete and accurate editions of our major authors' works; studies of the background and events of the Revolutionary period and of the changing structure of American institutions between 1776 and now; investigations of America's relations with the world; organization of state archives to facilitate the work of future historians; and a series of international conferences, bringing the world's most distinguished scholars to this country to exchange with their American counterparts perspectives and insights into the American experience and America's place in world history.

* * * * *

These and the other program elements described in detail on the following pages represent restructuring or refining of established programs, expansions to the level anticipated in the appropriation request for FY 1974, or increases formerly projected at somewhat higher levels in the agency's earlier proposals which formed the basis for its reauthorization last year.

NATIONAL ENDOWMENT FOR THE HUMANITIES

Summary of Funds Available

	1973 Actual	1974 Estimated	1975 Requested	Increase
Appropriation, definite program	$34,500,000	$44,500,000	$72,000,000	$27,500,000
Appropriation, indefinite matching funds	3,500,000	6,500,000	10,000,000	3,500,000
Total appropriation	38,000,000	51,000,000	82,000,000	31,000,000
Gifts and donations	4,395,037	6,500,000	10,000,000	3,500,000
Transfers from other agencies	135,000[1/]	300,000[3/]	[4/]	-300,000
Recovery of prior years' obligations ...	530,019	- -	- -	- -
Unobligated balance prior year	4,404,683	6,995,206	- -	-6,995,206
Total available	47,464,739	64,795,206	92,000,000	27,204,794
Transfers to Arts Endowment (-)	17,500	- -	- -	- -
Obligations (-)	40,452,032	64,795,206	92,000,000	27,204,794
Unobligated balance	6,995,207[2/]	- -	- -	- -

1/ Includes transfers from the Arts Endowment ($35,000) and Smithsonian Institution ($100,000)
2/ Includes $4,894,578 in definite funds, $77,265 in unrestricted gifts and matching funds, and $2,023,364 in restricted gifts and matching funds committed to approved projects but received too late in the year to be obligated.
3/ Includes transfer of $200,000 from the American Revolution Bicentennial Commission and $100,000 from the Smithsonian Institution.
4/ Excludes potential transfer of $100,000 from the Smithsonian Institution.

NATIONAL ENDOWMENT FOR THE HUMANITIES

Analysis by Program Element

Program and Element DEFINITE APPROPRIATION	FY 1973 Actual	FY 1974 Estimated	Fiscal Year 1975 Unobligated Balance Prior Year	Fiscal Year 1975 Requested	Fiscal Year 1975 Estimated Total Available	Increase or Decrease
Public	$9,490,223	$19,200,000	--	$30,800,000	$30,800,000	$11,600,000
State-based programs	5,160,094	8,750,000	--	15,000,000	15,000,000	6,250,000
Film-TV program	1,357,973 1/	4,500,000	--	6,000,000	6,000,000	1,500,000
Museum program	734,430 2/	2,750,000	--	5,000,000	5,000,000	2,250,000
Program development centers	1,686,846	1,700,000	--	2,500,000	2,500,000	800,000
Special projects ...	550,880	1,500,000	--	2,300,000	2,300,000	800,000
Education	7,831,352	13,145,000	--	15,800,000	15,800,000	2,655,000
Institutional grants	4,101,885	6,570,000	--	7,800,000	7,800,000	1,230,000
Planning	(847,735)	(750,000)	--	(1,000,000)	(1,000,000)	(250,000)
Program	(825,181)	(3,420,000)	--	(4,400,000)	(4,400,000)	(980,000)
Development	(2,428,969)	(2,400,000)	--	(2,400,000)	(2,400,000)	(--)
Projects	3,729,467	3,875,000	--	5,050,000	5,050,000	1,175,000
Higher education	(1,602,954)	(2,500,000)	--	(2,850,000)	(2,850,000)	(350,000)
Elementary and secondary	(2,126,513) 3/	(1,375,000)	--	(2,200,000)	(2,200,000)	(825,000)
Higher education humanities institutes	4/	2,200,000	--	2,200,000	2,200,000	--
Cultural institution programs	--	500,000	--	750,000	750,000	250,000

1/ Includes transfer of $12,500 to the Arts Endowment.
2/ Includes transfer of $100,000 from the Smithsonian Institution.
3/ Includes transfer of $35,000 from the Arts Endowment.
4/ Included under "Higher Education Projects."

Analysis by Program Element (continued)

Program and Element	FY 1973 Actual	FY 1974 Estimated	Fiscal Year 1975 Unobligated Balance Prior Year	Fiscal Year 1975 Requested	Fiscal Year 1975 Estimated Total Available	Increase or Decrease
Fellowships	$6,993,846	$7,270,000	--	$9,800,000	$9,800,000	$2,530,000
Residential fellowships						
College faculty	--	--	--	2,600,000	2,600,000	2,600,000
Summer seminars	819,989	1,280,000	--	2,400,000	2,400,000	1,120,000
Professions	781,303	1,150,000	--	1,500,000	1,500,000	350,000
Center for advanced study	--	--	--	500,000	500,000	500,000
Independent study fellowships			--			
Senior	1,645,063	1,700,000	--	1/	--	-1,700,000
Younger humanist	2,291,441	1,430,000	--	1/	--	-1,430,000
Selected fields	432,000	550,000	--	1/	--	- 550,000
Jr. college faculty	600,050	660,000	--	1/	--	-660,000
Independent	--	--	--	2,400,000	2,400,000	2,400,000
Summer stipends	424,000	500,000	--	400,000	400,000	-100,000
Research Grants	5,293,533	6,540,000	--	11,250,000	11,250,000	4,710,000
Research grants	4,408,540	3,290,000	--	4,000,000	4,000,000	710,000
Editing grants	749,523	1,025,000	--	1,500,000	1,500,000	475,000
Research tools	2/	800,000	--	2,200,000	2,200,000	1,400,000
Research resource centers	135,470	725,000	--	800,000	800,000	75,000
Conferences and congresses	--	200,000	--	1,000,000	1,000,000	800,000
Bicentennial history program	--	300,000	--	750,000	750,000	450,000
State history program	--	200,000	--	1,000,000	1,000,000	800,000

1/ Included in "Independent Fellowships" and "College Faculty Fellowships."
2/ Included in "Research Grants."

Analysis by Program Element (continued)

Program and Element	FY 1973 Actual	FY 1974 Estimated	Fiscal Year 1975 Unobligated Balance Prior Year	Fiscal Year 1975 Requested	Fiscal Year 1975 Estimated Total Available	Increase or Decrease
Planning	$1,191,974	$3,539,577	--	$4,350,000	$4,350,000	$810,423
Development, evaluation and dissemination [1]	989,502	3,139,577	--	3,700,000	3,700,000	560,423
Youthgrants	202,472	400,000	--	650,000	650,000	250,000
Total obligations definite approp.	30,800,928	49,694,577	--	72,000,000	72,000,000	22,305,423
Unobligated balance	4,894,578	--	--	--	--	--
Total definite appropriation available	35,695,506	49,694,577	--	72,000,000	72,000,000	22,305,423
INDEFINITE APPROPRIATION						
Obligations from gifts and matching funds	9,668,604	15,100,629	--	20,000,000	20,000,000	4,899,371
Unobligated balance	2,100,629	--	--	--	--	--
Total indefinite appropriation available	11,769,233	15,100,629	--	20,000,000	20,000,000	4,899,371
GRAND TOTAL	47,464,739	64,795,206 [2]	--	92,000,000	92,000,000	27,204,794

1/ Includes all obligations from definite program funds for miscellaneous "Program development and evaluation" activities undertaken by NEH divisions (FY 73: $321,039) as well as specific project grants and $5,000 transfer to the Arts Endowment.

2/ Includes FY 1974 appropriations ($44,500,000 definite and $6,500,000 indefinite), carryover from FY 1973 ($4,894,578 definite and $2,100,629 in gifts and matching funds committed to approved projects but received too late in the fiscal year to be obligated) and transfers from other agencies.

PUBLIC PROGRAMS

(Definite Appropriation)

Activities	1973 Actual	1974 Estimated	1975 Request	Increase or Decrease (-)
1. State-based program	$5,160,094	$8,750,000	$15,000,000	$6,250,000
2. Film/TV program	1,357,973	4,500,000	6,000,000	1,500,000
3. Museum program	734,430	2,750,000	5,000,000	2,250,000
4. Program development centers	1,686,846	1,700,000	2,500,000	800,000
5. Special projects	550,880	1,500,000	2,300,000	800,000
Total	$9,490,223 1/	19,200,000	30,800,000	11,600,000

1/ Plus $257,806 in gifts and matching funds.

The Endowment's Public Programs respond to the legislative mandate to bring the humanities to the service of the general adult public throughout the country. The programs seek, through a wide variety of methods and resources, to encourage the use of knowledge, its application to the private and public lives of adult citizens throughout the nation. Through specially formed groups acting as regrant agencies in each state, humanistic knowledge is infused into the discussion of public issues at the state and community level; and through projects in the media, projects involving humanists from universities with community groups, and projects in non-academic institutions such as libraries, historical societies, and museums, understanding of the humanities and their significance is promoted. The fundamental goal of public humanities programs is to put the humanities, through a mutually strengthening dialogue between the scholar and ordinary citizen, to the service of the public good; and all projects are aimed at enhancing public appreciation, understanding and use of the humanities as they relate to the history, culture and values of our society. Through its Public Programs the Endowment promotes public education not of a traditional or conventional kind, but of a kind peculiarly appropriate to the citizens of a democracy, and it will finally broaden throughout the nation the understanding of responsible democratic citizenship.

As part of its purpose to identify and understand the American experience, NEH is committed to the serious exploration of the implications of American history. In all Public Program areas, an increased knowledge of our history and a deep understanding of the principles guiding the nation have been pre-eminent objectives. Inevitably work in these areas is centrally related to the nation's interests. Accordingly, the FY 1975 request contains no radically new programs to commemorate the nation's birth 200 years ago, but rather increased funding levels for those parts of the Public Programs that past experience has shown to be particularly suitable for giving the American people an opportunity to examine their heritage more deeply.

1. State-Based Programs ($15,000,000)

FY 1974 $8,750,000; FY 1975 $15,000,000; increase $6,250,000

At the urging of Congress the Endowment embarked in FY 1971 on a State-based program to test ways in which the agency could share its responsibility for public humanities programs at the Federal level with organizations and institutions at the state and local level. The intent of the experiment was to marshal the human and financial resources in the states for the creation of public humanities programs responsive to the particular concerns of each state, and to do this through persons experienced in approaching the general public in their area.

The State-based program, through a partnership between the Endowment and State-based committees in the humanities, seeks to bring new light to discussions of public policy issues important to each state, to provide at the grassroots level for a continuing re-examination of the values underlying the American experience, and to serve the democratic process by stimulating rational and informed dialogue on the historical and philosophical background of important public issues. From a beginning of 16 states during FY 1971, to 42 states in FY 1973, with the involvement of all 55 states and jurisdictions in FY 1974, the State-based program has confirmed and realized the potential of these in-state resources on which the program is built.

Experience has shown that a substantial number of local institutions and organizations has become effectively involved in the State-based program; that the general adult public and the academic humanists, the key constituencies for the program, willingly participate; and that a significant number of leaders from diverse sectors of the population -- business, labor, the professions -- will commit time and energy to serving on the committees which administer the program in each state. After thorough consultation with the Endowment, a state committee develops a theme embracing some of the public policy issues of prime concern to the citizens of the state, and develops specific procedures for the regranting of Endowment funds, by competitive selection, to organizations within the state submitting proposals upon the chosen theme.

The variety of institutions and organizations receiving grant funds in operational states is impressive, and the number of applicants is growing each year. More than 350 colleges and universities, including community colleges, have been involved in this regrant activity, over 100 libraries and historical societies, 50 educational television and radio stations, and 200 state and local organizations, including Chambers of Commerce, bar associations, labor unions, women's clubs, and farm groups. The impact of state-based activity has been broad: the 22 operational states completing a full grant year funded some 475 regrant projects, averaging 22 regrants per state and $4,000 per regrant. These regrant projects reached more than 4,000,000 adults directly or through television and radio.

The current Endowment funds available for the program in a single state average $165,000. The program has now generated sufficient evidence from its operational states to substantiate the conclusion that they remain underfunded in fiscal 1974 in relation to the demand by their citizens for opportunity to participate in the programs - a demand which steadily increases as the programs take root.

Present funding will sustain fully operational programs, at an average grant of $160,000 per state, in all 55 states and jurisdictions in fiscal year 1974. The request for 1975 is predicated on a fully operational program in all 55 states and jurisdictions, with an increase in the average grant to $275,000, all of which must be matched on a one-to-one basis with private, state and local funds and in-kind gifts. With these funds, the State-based program can extend its proved impact to a potential public compromising every adult American.

Examples of State-based Programs

(i) The Indiana Committee for the Humanities functioned in its first year under the general theme: "Government and the Family." It received 57 proposals requesting a total of $275,000, and funded 37 projects with its available funds of $120,000. These grants ranged from $666 to $8,790, involved approximately 200,000 adults and more than 800 professional humanists, and were conducted through such diverse organizations and institutions as community colleges and major 4-year institutions of higher education, an educational television station, two urban public library systems, a county council of churches, several civic and community organizations, and two local humanities committees created for the purpose. Programs included a public lecture and symposium series sponsored by a city government and co-sponsored by eight civic and community organizations which drew a cumulative audience of 15,000 people; two separate series of discussions in senior citizen high-rises with audiences ranging from 25 to 150 people, focusing on the role of government and the place of the elderly in family life, and four public seminars with philosophers, historians, and other humanists discussing "The Crisis of Divorce" with a public audience.

(ii) The North Carolina Committee in its first year of operation focused on the theme: "Traditions in Transition: The Impact of Urbanization on North Carolina Communities." It received 64 regrant proposals, funding 30 with its available funds of $125,000. Ranging in size from $140 to $25,000 and providing local matching contributions of $216,701, the projects represented every geographical region of the state, reached about 50,000 adults and involved some 300 humanists. Sponsors included 20 colleges and universities in the state, Chambers of Commerce, the League of Women Voters, two technical institutes, two public libraries, and a number of community and civic organizations. Regrant projects included the Johnston County Forum, attended by some 4,000 persons during its three-month program, in which humanists examined, through a series of lectures, discussion groups, study meetings and selected readings, the impact of urbanization on business people, farmers, and the community as a whole. (This forum has been continued through private local funding as a regular community activity.) Another program mounted by a consortium of five colleges for the 26 western counties of the state utilized humanists from the disciplines of history, philosophy, literature and the humanistic social sciences in a consideration of the impact of urbanization and industrialization on the traditional culture of Appalachia. The consortium, through films, discussions, exhibits, and lectures, reached approximately 20,000 adults in the western part of the state.

2. Film/TV Grants Program ($6,000,000)

FY 1974 $4,500,000; FY 1975 $6,000,000; increase $1,500,000

The Film/TV Grants Program provides support for the advancement of the humanities and the communication of humanistic insights to the general public by means of film, television, and radio production and broadcast. Program grants encourage humanities scholars and institutions to combine their talents and resources with professional writers, producers, directors and technicians in the media. The primary operational associates for film and television purposes are public broadcast organizations because they share a commitment to provide cultural, instructional and intellectual programming unavailable on the commercial networks.

Past Endowment-supported projects include such productions as "To Be Young, Gifted and Black," the "Humanities Film Forum," "The Wright Brothers," and "War and Peace." The educational and popular success of these film programs -- "The Humanities Film Forum" alone attracted the fourth largest audience in public television history -- points up the extant interest of a vast audience in this country for high quality films in the humanities, and a need for major expansion of Endowment support in the film and television area. As the sole national agency charged with promoting broad public appreciation of our history and culture, and at the urging of the National Council on the Humanities, the Endowment has given film and television projects high priority over the next several years.

This priority reflects the fact that television, and the use of film for television, is the most pervasive medium of contemporary communication, as indicated by research surveys which reveal that television has become the primary source of information for the vast majority of Americans (64 percent). More than 40 million Americans currently watch television 35 hours or more per week. Programming in the humanities, however, is limited to a very few hours during any typical television season, barely beginning to meet the need for mass-media humanities programming. Thus, the public interest in humanities programming remains largely unfulfilled.

The costs for quality film productions seem high in absolute terms. A 15-hour series involving first-rate scholars, producers, writers, directors, and actors may cost $3 million or more. On the other hand, if such a series reaches some 30 million viewers per program -- as it well may through broadcast and re-broadcast -- or 300 million for the series, the outlay per viewer hour comes out to one cent. For those films with enduring interest and value, the audience will be much greater by distribution to museums, colleges, and community groups over a period of years. The final investment for the highest quality programs thus comes to only a fraction of a cent per viewer. Equally important, high quality television programming in the humanities proves its worth in terms of learning, enrichment of public understanding of the humanities and the larger perspective they offer on value-conflicts affecting the entire society today. These attributes illustrate the value, both humanistic and economic, of Endowment-supported productions.

It should be noted that in the normal course of the grant application process, the film and television program has received in the past, and expects to continue to receive in view of rising interest

in the nation's Bicentennial, applications which bear on American culture and historical themes. In FY 1973, for example, five of the ten grants made by the film and television program were related to peculiarly American topics. At the projected funding level of $6,000,000 for FY 1975, it is anticipated that approximately 70 percent of the projects funded will be related to the historical and cultural antecedents of our present society.

The planning of film and television programs centered in the humanities and designed for general audiences in FY 1975 entails three distinct approaches:

a. Production grants ($4,900,000)

Production grants will be made in two principal areas:

(1) for original productions on history and biography, and

(2) for filmed dramatizations of major works of literature.

Work in the first category, in FY 1975, will emphasize American history, and will include (1) "The Adams Series," a 12-hour program sequence embracing nearly 200 years of American history and society beginning with John Adams, his immediate progeny, and succeeding generations; (2) two separate biographical series on George Washington and Thomas Jefferson; and (3) a documentary series which will analyze "The American Experience" through an examination of American history, government, literature, philosophy, art and architecture, with material drawn from newsreels, archival photos, feature and documentary films. Direct funding of these will require $3.5 million; one-third of the total costs in this area is expected to be met through gifts and matching funds.

In the area of literature the Endowment will expand support of American productions of both stage works and dramatic adaptations of short stories which illuminate the evolution of American society. The works of such authors as Mark Twain, Willa Cather, Herman Melville, Ernest Hemingway, William Faulkner, Eugene O'Neill, and others constitute a fertile source for visual program productions. These presentations will reach tens of millions of people through separate television broadcasts and will cumulatively form the beginnings of a film library of the major works of American and world literature to be made available in colleges and institutions. Direct funding of these will require $1 million in FY 1975. This amount will allow for the completion of 10 one-half hour productions of dramatic serializations of short stories, and two 2-hour productions of classic plays. It is expected that one-third of the total costs in this area will be met through gifts and matching funds.

The content and substance of such humanistic material translated to the film or television medium provides a unique opportunity in which scholars, writers, producers and actors can share their special talents in cooperative activity between countries. At the requested funding level for FY 1975 two grants for such co-production activities will be made to provide support for cooperative ventures by an American public broadcasting station and a British broadcasting organization. The first will be a joint American-British series, of two 2-hour specials entitled, "How We Won the War/How We Lost the War," involving scholars of American and British history examining the causes and effects of the Revolutionary War within a documentary and dramatic format. Another joint project will produce a 1-1/2-

hour dramatization of Dickens' classic novel, Hard Times. The total cost for both of these projects would be $800,000 with half the cost ($400,000) to be shared by the British broadcasters.

b. Development Grants ($500,000)

In order to insure continuing growth and improvement in the quality of the film and television program material in the humanities, the Endowment plans to make two grants of approximately $250,000 each in FY 1975 to create film and television "program centers." These "program centers" will provide the continuity for research, development and eventual production of film and television programs central to the humanities. The "centers'" main responsibility will be to promote and sustain ongoing relationships between humanistic scholars and the best production talent available from both commercial and non-commercial sources. It is planned that during FY 1975 these two "program centers," in addition to research and development activities, will produce 3 hours of pilot programs to explore ways of blending technical talent with humanistic expertise to produce innovative film and television programs of high quality in the humanities.

c. Acquisition grants ($600,000)

The purpose of an acquisition program is to acquire television broadcast rights for existing material of humanistic import, with additional funds to prepare these film and television programs for airing in a series which is complemented by "live" humanistic analysis. Two types of existing films and television material have special significance to the humanities: those which re-create great novels or dramas, such as "War and Peace" (shown this year over public television with NEH aid); and those which describe historical events and provide special insight into the social and cultural characteristics of different historical periods.

Mere showing of such films on television, however, does not fully meet the Endowment's purposes. Indeed, the very power of excellent film to convey strong impressions requires that analysis of the film's content and approach be furnished by competent scholars. Accordingly, each presentation will include careful introductions to establish a general context and printed material to accompany the programs as viewer and teacher guides will be made available.

The FY 1975 request will permit the support of one or more series, consisting of approximately 21 hours of such programs, with primary distribution over the public broadcast network. This will include one series of thirteen hours, including presentations of great dramatic works such as Chekhov's Uncle Vanya, Ibsen's The Wild Duck, and Goldsmith's She Stoops to Conquer. In addition, support will be provided for the acquisition of a series dealing with the historical roots of the United States. Both series together will cost approximately $600,000.

3. Museum Program ($5,000,000)

FY 1974 $2,750,000; FY 1975 $5,000,000; increase $2,250,000

The purpose of the Endowment's Museum Program is to help the nation's museums and historical societies interpret their collections in an educationally satisfying way to the public. This objective responds to pressing needs identified by the museum profession which believes that now as never before the success of America's museums depends directly on their becoming effective instruments in an historical and cultural context for the education of the general public.

It is the Museum Program's concern to encourage the development of expository programs, to support exhibitions which demonstrate the coherence of a museum's collection, and which put the objects preserved by a museum into their cultural context.

At its inception, the Endowment recognized museums as a focus of its concern and during its first five years provided almost $3.4 million (up to 8 percent of its annual budget) to museums and museum-related projects through its various operating divisions. The 3,681 history museums, the 1,457 science museums and the 886 art museums in the United States all represent unique repositories whereby the history of people, their responses to their environment and the values they develop as a result of that confrontation, can be presented in an articulate manner to a national audience. In FY 1973, 34 grants were made to museums and historical societies. Projects have ranged from training fellowships to major travelling exhibitions, have reached approximately three million people, and have involved the staffs of museums, historical societies, schools, uand universities with the general public in almost every state In FY 1974 the anticipated average size of museum grants will be at the level of $30,000. The cost-sharing contribution of these institutional grants will amount to one-third of the total cost.

In FY 1975 Endowment support for museums will be provided through grants in the following major areas:

a. Interpretive exhibition grants ($3,500,000)

Among the several thousand museums in this country, relatively few are equipped at present to manage valuable collections of even modest dimension, whether they be permanent or borrowed; and perhaps not more than 500 museums house significant collections and have adequate staffs to deal with borrowed exhibitions.

Given this reality and the Endowment's commitment to the broadest dissemination of interpretive exhibitions -- drawn, at least in part, from the major collections -- a significant movement of the program to promote collaborative projects among major museums is proposed in FY 1975. Grants for projects involving the participation of major institutions are envisioned, providing for the pooling of collections and staff in mounting the highest quality exhibitions, thoroughly and imaginatively interpreted. A significant number of such exhibitions will be available for travel either in whole or in part to nearby museums capable of installing and conducting them.

Major exhibitions will be mounted utilizing collections which emphasize the history of the country through visual, tangible objects, and also show the influences of the United States upon other countries. These exhibitions will travel to major institutions in this country as well as other countries and will illustrate comparisons, influences and traditions in the humanities, providing the broadest perspective in the totality of the cultural and historical implications of the past 200 years of American society.

A total of 12 grants for top-level collaborative projects of this kind will be supported at an average cost of $200,000 each for a total of $2,400,000. An additional $300,000 will be provided under the program for 20 planning grants during FY 1975 with a view to potential funding in the subsequent fiscal year.

Finally, under the Interpretive Exhibition Grant Program, an experimental effort to design and create readily transportable interpretive exhibitions and programs relating to the interpretive exhibitions for use in the smaller museums will be undertaken in FY

1975. In order to test possible models for dissemination eventually among the thousands of small museums, five grants of approximately $160,000 each are contemplated.

b. Museum community education grants ($600,000)

The museum as a resource for the education of the general public, particularly community groups, has not been fully utilized in the past. Museums -- especially those in urban areas with a variety of collections, at least some full-time staff, and a central location -- are a vehicle through which the Endowment explores new ways to increase the educational opportunities for a wide variety of adult populations. Through some 30 grants of approximately $20,000 each, NEH will encourage the development of sound community education programs affording museums the opportunity to be responsive to new audiences which surround them.

Evidence of strong community support in the planning and implementation of programs which focus on ways of better utilizing museum collections will characterize grants for community education programs. These grants will support the development of seminars/film series, outreach programs, orientation galleries, and programs which relate collections to historical events and incidents familiar to audiences, using audio-visual techniques for demonstrations or interviews designed to enhance museum visits.

c. Historical society programs ($500,000)

The Endowment recognizes the importance of historical societies as resources of humanities education for the general public. Until recent times these resources have been used primarily by specialists in carrying out research for scholarly publications. The nation's many thousands of historical societies have unique capacities, in terms of facilities, staff, collections, archives and other resources, but generally they have not been made available to the broad public, except in special cases. This circumstance has inhibited the growth of truly public programs and exhibitions as well as interpretive publications from these important institutions aimed at popular audiences.

The increasing interest of the public in regional, local, and state history documented by these agencies offers a special opportunity for the utilization of, and broad access to, these important resources. The Endowment will make possible, while continuing to support the interpretive use of historical society collections, an experimental program to build on the strength of the agencies' resources by providing funds to journals of historical societies for high quality articles that have a significant public appeal. The program is designed to support professional consultation, design consultation, reader surveys, editorial assistance, and the commissioning of a modest number of articles that encourage the journals to appeal broadly to popular audiences while relying on humanistic scholarship. Planning grants to average $10,000 to $15,000 each for a total of $250,000 will be available to the historical societies. Another $250,000 will also be made available subsequently to implement this planning stage with average grants of $25,000.

d. Museum personnel development grants ($400,000)

Recognizing that no single course of training will provide the wide variety of museum educators with the requisite skills in interpretive exhibitions, the Endowment will adopt several different approaches to personnel development. Through continuation of its fellowships and internships, the Endowment will make it possible for a limited number of people to prepare for museum careers through study

in the humanities; such training will develop skills in familiarity with recognized approaches to interpretive projects, producing new professionals and a new kind of competence in the museums they join. Funding to support such training for approximately 13 individuals at an average cost of $8,500 is requested for FY 1975.

Seminars and institutes for the in-service training of museum staff, especially those of the small museums and historical societies, will be sustained in 1975 at a cost of $100,000. These intensive one- or two-week programs, as well as a summer program of greater duration, are an opportunity for beginning professionals from a variety of museums to exchange ideas and information in a fresh context with contributions from experts to stimulate new approaches.

In addition to these established activities, two new areas of personnel development -- improved training for voluntary staff and special workshops for local Bicentennial exhibitions -- will be tested in FY 1975. Almost all museums, large and small, use volunteers as teachers and guides: it is also clear that they are often necessary and can provide valuable service when they have appropriate training. In FY 1975, the Endowment will mount experimental efforts in a defined region of the country, bringing an estimated 50 key volunteers from at least 30 museums in the experimental area together for a total of two weeks of guided workshop training. Funding of $87,500 for this pilot project is requested.

Finally, the Endowment will support workshops in all the 50 states involving museum professionals in common exploration and planning of interpretive exhibits specifically related to American history and culture. These kinds of coordination sessions are crucially important in light of the special and serious responsibility upon the nation's museums to present over the next two years professionally developed exhibitions on our collective past as a nation. Support at the level of $100,000 is required.

Examples of museum program grants:

(i) A grant of $22,579 to the Museum of New Mexico in Santa Fé has been made to mount a program which is attempting to respond to the needs of the large number of Spanish-speaking people in a statewide project. The Museum has laid out a program to involve these groups, not simply with the planning of new exhibitions on their history and culture (by public forums and group seminars) but also in collecting interpretive materials, setting up bilingual exhibitions (including videotape, slides, and taped narratives), and evaluating the effectiveness of the materials in attracting and informing the general public of the entire state and the tourist population about Hispano culture.

(ii) Grants totaling $214,900 were made to four museums -- the National Gallery of Art, Washington, D.C., the Los Angeles County Museum of Art in California, the Art Institute of Chicago in Illinois, and the Kimbell Museum of Fort Worth, Texas -- for the exhibition of paintings on loan to the United States from the Soviet Union. Support was given for the interpretation of the paintings to provide an historical and cultural context: educational programs such as supportive lecture series and films, a brochure which explained some background on the works of art, and multilingual labels. All were made available without charge to over one million Americans visiting the exhibition.

4. Program Development Centers (National Humanities Series) ($2,500,000)

FY 1974 $1,700,000; FY 1975 $2,500,000; increase $800,000

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Through the National Humanities Series, live presentations in the humanities are brought to adult audiences in smaller communities (under 50,000 population) throughout the nation. Since the first Center began developing Series programs in 1969, nearly 300 communities have participated in Center programs, in all 50 States. Each participating community is visited up to three times a year by a team of humanists who give prepared presentations on subjects of concern to contemporary adult audiences and to which the humanities offer useful perspective and insight. Each visit extends over several days and involves a number of presentations, some to particular groups (Rotary, League of Women Voters) and at least one for the community at large. Over 100 academic humanists have taken part in Center programs, touring with them for periods as long as six months to areas which do not generally have access to academic resources but which encompass 30-40 percent of the population.

Each of the three Centers currently funded by the Endowment (two fully operational, mounting programs in designated areas of the country, and the third in a "pilot year" of experimentation) has developed its own method for presenting an important subject in a humanistic context and engaging adult audiences in fruitful discussion. The Western Center (located at the University of California at Los Angeles) produces short film segments specifically designed to promote thoughtful discussion of issues which directly affect their audiences. The Midwest Center (located at the University of Wisconsin, Madison) stresses the use of printed materials, excerpts from the humanities on fundamental human concerns. The Pilot Center, the National Project Center for Film and the Humanities (located at the Graduate Center of the City University of New York), is assembling a number of film series on different themes, together with written commentary by humanists, and testing their effectiveness in communities of the Mid-Atlantic States.

During the current fiscal year (FY 1974), two new Centers, in the South and in the East, will be instituted and these will be producing their first presentations in the Fall of 1974. In addition, the three existing Centers will be seeking to respond to the express interests of the communities they serve. Because American cultural and historical topics are by their very nature replete with humanistic values and issues, the two new Centers will develop programs exclusively devoted to such subjects during FY 1975. Existing Centers will naturally be using programs developed in earlier years of operation; in addition, most of their new programming -- and more than half of their total programming -- will address topics concerning American society.

Funding for FY 1974 is $1.7 million to cover renewed funding of the three existing Centers and first-phase funding for two new Centers. Funding requested for FY 1975 is $2.5 million, for allocation approximately as follows: $700,000 each for the Western and Midwest centers; $400,000 each for new Centers in the South and in the East; $300,000 for the National Project Center (Film Center). Participating communities have generally been contributing $400-$500 per program visit for space rental, publicity costs, and travel to program sites within the area.

Examples of Centers programs:

(i) "We Hold These Truths" -- a program developed by the Western Center examining the origins and present-day reality of civic responsibility in America, presented to general audiences in 28 communities of 13 Western States. After screening a 30-minute film developed by the Center, each panelist gave a 10-15 minute commen-

tary, developing lines of inquiry characteristic of his or her particular discipline. An hour or more of open discussion with the audience makes up the second half of each program.

(ii) "What Values Do We Want To Affirm in the Family?" -- a presentation of the Midwest Center in Red Wing, Minnesota, conducted by Patricia Kane, Department of English, Macalester College. The subject was selected by the participating humanist and a local committee conversant with the concerns of the community. The humanist assembled a set of readings, ranging from Lucius Apuleius to Hawthorne and Faulkner. This material was provided to the prospective audiences in advance of the humanist's visit to the community. The program took place over a period of two days, with the humanist meeting with groups of adults to explore the relationship of the readings and of the humanities generally to value choices and conflicts affecting the family.

5. Special Projects Grants ($2,300,000)

FY 1974 $1,500,000; FY 1975 $2,300,000; increase $800,000

Originally conceived to provide support for a limited number of local projects initiated by community institutions with access to resources in the humanities, the Special Projects program has become the experimental arm of the Endowment's Public Programs, helping to test new methods of relating the disciplines of the humanities to the general adult public. Special Projects has the capacity to respond broadly to applications from all sources of humanities programs -- national organizations, civic and community groups, colleges and universities, as well as those institutions (e.g., a public broadcasting station or a museum) whose project does not fit into the more formally defined areas required by other program activities.

Characteristically, the Special Projects program supports what may become exemplary program models. Three types of projects illustrate areas appropriate to humanistic insight and analysis:

(1) cultural transmission -- the examination of the central traditions of western or other cultures and the great works, questions and ideas which permeate present-day civilization;

(2) self-examination -- the inquiry incorporating philosophy, literature, history and other fields into the values and predominant forces that most deeply affect a citizen's private and public life;

(3) social examination -- the analysis of problems of significant social dimension which are ofc common concern and to which the humanities have characteristically spoken.

The range of applications to Special Projects includes institutions as diverse as universities and historical societies, public libraries, educational television stations, civic groups and educational councils. In FY 1973 eleven grants, averaging $46,410, were made for experimental humanities programming. These involved more than 230 scholars in the humanities, approximately 10 major universities, eight community colleges, and 120 community groups and organizations. Over a million people were involved directly, or indirectly, through the use of media.

In the current year, FY 1974, the average grant size for experimental programs will be approximately $50,000 for a total of between 10 and 15 grants nationwide. In addition, Special Projects will initiate planning, development and operation of two major urban public humanities projects costing approximately $200,000, and

grants up to a total of $200,000 are anticipated to major metropolitan libraries to support public humanities activity uniquely suited to their capacities.

Emphasis next year, FY 1975, will be in three essential types of activities:

(1) experimentation focusing on regional projects, institutional coordination, and the exploration of areas naturally susceptible to humanities programs but certainly unexploited (e.g., cable television -- 12 grants at $50,000, a total of $600,000)

(2) carrying forward the "Great Issues in the American Experience: A Community Dialogue" project, which will support experimental grants in five urban areas to mount community-wide projects around major themes of the great historical documents and events in our past, and their continuing relationship to contemporary America (five grants at $200,000, a total of $1 million)

(3) responding to the stated desire of public libraries to expand current public programs into fields of the humanities. In view of the fact that libraries as community institutions have the largest humanities-related resources alongside colleges and universities, Special Projects will provide grants to major metropolitan libraries and library systems to support workshops and study groups, experimental humanities film programs, and public lectures and seminars. Grants will also be made to leading state library agencies for regional humanities programs of a similar kind (seven grants at $100,000 for a total of $700,000).

Examples of Special Project grants

(i) A grant of $66,275 was made to the University of Arizona for a cooperative project with the state's leading newspapers, other academic institutions, and commercial television stations. The project theme deals with the past and present conceptions of "progress", related to contemporary public issues, including the state's history, urban growth, agricultural development, system of education, impact of technology, legal apparatus, and government. Individual issues are tested monthly, and involve weekly newspaper articles written by academic humanists, followed by a one-hour TV broadcast, and complemented by live discussions established by the state university's continuing education division. The entire series will ultimately be summarized in pamphlet form and made available to the public at no cost.

(ii) A grant of $31,996 was made to Washington University, St. Louis, to support a series of presentations on the problems and opportunities of the American City. The project involves the general public, members of local organizations including public libraries, governmental agencies, the media, historical societies, unions, business and professional groups in discussion with 28 faculty on such questions as: the future of American cities, origins and classical models, the European metropolis, suburbia, the ethnic urban experience, cities in literature, the law and metropolitan problems, and political theory and the human condition in urban environments. Presentations incorporate formal lectures, workshops and discussion groups. All sessions are held off-campus at the Teamsters Council Plaza in mid-town St. Louis. Publicity is provided over radio and television.

EDUCATION PROGRAMS

(Definite Appropriation)

Activities	FY 1973 Actual	FY 1974 Estimate	FY 1975 Request	Increase or Decrease (-)
1. Institutional grants				
a. Planning	$847,735	$750,000	$1,000,000	$250,000
b. Program	825,181	3,420,000	4,400,000	980,000
c. Development	2,428,969	2,400,000	2,400,000	--
2. Education projects				
a. Higher education	1,602,954	2,500,000	2,850,000	350,000
b. Elementary and secondary	2,126,513	1,375,000	2,200,000	825,000
3. Humanities Institutes	--	2,200,000	2,200,000	--
4. Cultural Institutions	--	500,000	750,000	250,000
Total	7,831,352 1/	13,145,000	15,800,000	2,655,000

1/ Plus $3,921,515 in gifts and matching funds.

The NEH Education Programs help educational institutions improve instruction and make more effective use of resources in the humanities. The Endowment serves educational institutions at all levels, funding programs of organized study in the humanities--programs of long or short duration which will help develop or strengthen humanistic education within an institution, discover or sustain relationships among different humanistic disciplines or subjects, and otherwise encourage humanistic pursuits which will be worthy in themselves and will enhance the life of the humanities and the institutions which house them.

It is a relatively recent phenomenon for educational institutions and departments or divisions within such institutions to seek cooperation among themselves in order to enhance their humanities offerings. The Endowment has grown with that phenomenon, indeed has helped to accelerate its pace. Now, as the Endowment's Education Programs become more widely known, the number of applicants increases steadily. Moreover, responsibilities in this area are cumulative, since institutional programs are necessarily funded for three to five years in many cases. The swing towards the humanities

in vocationally-oriented or professional schools (e.g., law, medicine, and engineering) makes one kind of demand upon the Endowment, as does the movement of liberal arts students away from the traditional humanities and into the social sciences. Thus some institutions wish to devise programs to revitalize humanistic instruction, while others wish to effect the introduction of the humanities into their curricula as wholly new enterprises. The NEH Education Programs are designed to aid the accomplishment of both these objectives.

The Endowment's effort to aid and encourage the creation and teaching of interdisciplinary courses is represented particularly this year by a continuation of its program of Humanities Institutes. The demand for this effort has been great, both on the parts of professional educators and students: if successful, it may enhance the art of humanities teaching more than has yet been attempted in American formal education. Meanwhile, to encourage alternative educational patterns, the Education Division also addresses itself to efforts on the parts of the nation's cultural institutions to realize their full potential as places of formal education. This program, justifiably small in its experimental stage this year, shows the promise of demonstrating how cultural institutions, libraries and museums, unlike our other institutions of formal learning, may bring new and deeper knowledge of the humanities to a varied public by making use of the unique resources of these institutions. The aim of this program is to make formal education in the humanities a continuous event in people's lives.

Four major programs characterize the Endowment's work in formal education:

1. Institutional Grants

Institutional Grants are designed to support curricular development in the humanities which goes beyond the limitations of a single discipline, or even a single course. The principal target is the undergraduate student, whether at two- or four-year institutions, but graduate students and students in professional schools have also been served. The programs supported by three types of grants -- Planning, Program, and Development -- are, in a real sense, seminal; thus it is anticipated that they will continue to grow and develop after funding ends, whether or not there is a second application for Endowment support (as there frequently is following the award of a Planning grant). Indeed, in the case of Program and Development grants, a prerequisite is the institutional commitment to continuation of the program after funding ends.

a. Educational Planning Grants ($1,000,000)

FY 1974 $750,000; FY 1975 $1,000,000; increase $250,000

A Planning grant enables an institution which has developed a tentative but concrete plan addressed to curricular needs in the humanities to test that curriculum on a pilot basis and to evaluate the pilot activity toward necessary revision and refinement. This grant allows an institution to test the viability of a proposed curriculum before making a heavy commitment to it in terms of staffing and allocation of institutional resources. Such grants are limited to $30,000 for a period not exceeding eighteen months, and

are sometimes the preliminary stage in an institution's progress into the "Program" or "Development" categories of funding. It should be stressed, however, that Planning grants usually have intrinsic merit which represents useful results even without further applications. Funds are used mostly for released time for faculty--an expense few institutions can presently afford; yet without such periodic planning, the humanities curriculum might stagnate and its influence diminish rapidly. Finally, it should be noted that Planning grant applications and the results of those eventually funded often serve the Endowment's own planning, keeping the agency up-to-date and informed about changes in humanistic education and about effective ways of meeting developing needs.

Growth rate in Planning applications has been some 25 percent annually, i.e., 80 in FY 1973, 120 in FY 1974. Indeed the need for Planning grants is continuous and considerable in that an institution may re-apply and present a valid case for further planning after an interval of a few years. Twenty-nine new grants were awarded in FY 1973; each grant involves on the average 10 faculty who teach 2,000 students; thus these grants had direct impact on 60,000 students and faculty. In FY 1974, 25 such grants are planned. The FY 1975 projection would allow for 35 such grants, and thus affect approximately 70,000 students. Grantees are required to contribute at least 20 percent of the total costs of Planning projects.

Examples of Planning Grants

(i) At Western Kentucky University, in Bowling Green, Kentucky, faculty wish to offer students an alternative means of meeting the fifteen-credit requirement in the humanities which is often a random and diffuse selection of unconnected courses. The pilot course under the Planning Grant will be the Humanities Semester, taught as a series of four concurrent courses, each three-and-a-half weeks in length, in which students will take intensive courses in the history, philosophy, literature, and the fine arts of a given cultural period.

(ii) In Monterey Peninsula Community College, Monterey, California, the faculty wishes to address two problems: students who "drop in" and "drop out" of college, often without earning credit, and students who lack understanding of or enthusiasm for humanistic learning. The solution is a pilot series of two-week mini-courses offering one credit for intensive study of different aspects of western civilization. It is hoped that these two-week intensive experiences will, sooner or later, motivate the student to pursue a particular topic in greater depth by taking a regular course. The program is ambitious, and could provide a model for other two-year institutions with similar student problems.

b. Program Grants ($4,400,000)

FY 1974 $3,420,000; FY 1975 $4,400,000; increase $980,000

A Humanities Program is defined as a group of related courses or an ordered program of studies in the humanities, focusing upon a particular area of study. For example, a Program grant might address a specific region, culture or historical area, or it might reform humanities instruction on a particular level of the curriculum such as freshman year studies. A Program grant is distinguished from a Development grant (see further below) by the scope of its proposed

activity. A Program grant addresses itself to a single aspect of the institution's humanities curriculum, while a Development grant encompasses the full range of instruction in the humanities at the institution. Support is limited to a maximum of $180,000 over a three-year period; during the grant period cost-sharing increases from at least 20% of total program costs in the first year to over 50% in the final year. This enables the institution to assume total costs more readily when funding ends; such commitment to continuation of the program is an essential part of a successful application.

Example of humanities program grants

(i) At Colorado College in Colorado Springs, a Program Grant, typical of the Endowment's interest in supporting the study of local history, will support a Southwestern Studies Program. Courses offered at Colorado will explore the history and sociology of the American Southwest and will be taught by an interracial and interdisciplinary team of faculty. One of the aims of the program is to make students aware of the problems confronting that region today. An advanced seminar for faculty will be held at the Newberry Library in Chicago, using that institution's fine collection of Southwest Americana. This program will reach some 2,000 students directly; many more will be indirectly influenced, however, since the program is expected to be emulated by other institutions.

c. Development Grants ($2,400,000)

FY 1974 $2,400,000; FY 1975 $2,400,000; increase --

These grants provide support sufficient to enable an institution to redirect its entire humanities program by means of a national and unified plan of curricular revision. To qualify for consideration, the institution is compelled to conduct a thorough analysis of its strengths and weaknesses in the humanities; it must furnish a long-range plan to improve both the quality and scope of instruction. Development grants are having a far-reaching impact on the teaching of the humanities in this country: because of their broad scope, their visibility on campus and the special demands they make of an institution, Development grants often effect a major reordering of educational priorities and generate and sustain student interest in the humanities. Development grants average between $100,000 and $200,000 a year over a three to five-year period. Cost-sharing by the grantee institution must be at least 20 percent of total costs in the first year of funding and is required to increase until, in the final year, the institution bears more than 50 percent of the costs. Frequently one-half or one-third of the NEH support is in the form of a gifts-and-matching grant, thereby encouraging private gifts to higher education.

Because of the great care that must be exercised in evaluating applications for grants of this size and complexity, no expansion of the Development grant category is projected for FY 1975. The number of applications in this category is increasing to twice the number in FY 1974 over FY 1973. A program of evaluation initiated in FY 1974 will be continued and expanded in FY 1975. At each grantee institution approximately 100 faculty members and 4,000 students will be directly affected. The grants for FY 1975 will therefore affect almost 30,000 students and faculty in seven states.

Examples of Development Grants

(i) At the University of Denver a Development grant is supporting a new approach to general education courses based on the premise that the proper introductory effort is one which concentrates upon a single culture in a moment of high creativity--such as Elizabethan England, Fifth Century Athens, Sung China--and views it from the perspective of several humanistic disciplines. The student is freed from other academic obligations for a space of one quarter, while undertaking a serious effort to understand the circumstances under which great and enduring cultures were developed. By such intense study of the moral and intellectual struggles of a people whose culture is different from their own, students are achieving not only a fuller understanding of the values of the humanistic disciplines, but also new perspectives on their own culture. This study is undertaken under the guidance of a large staff of specialists in the culture under examination; with both students and teachers thus concentrating their efforts, the study becomes truly a group enterprise and the student is introduced to a community of scholars. On the basis of these concentrated introductory offerings, interdisciplinary programs of extended study, equivalent to a major, are being developed.

2. Education Projects

The purpose of Project grants is to promote the development and testing of imaginative approaches to education in the humanities by supporting demonstration projects that can be completed within one or two years. Most projects are planned and implemented by small groups of faculty and are concerned with experimental courses or programs, the training of faculty in new approaches to their fields, the educational uses of libraries and other cultural institutions, or the development of new teaching materials. This program solicits particularly applications for projects that show promise of serving as models for other institutions.

a. Higher Education Project grants ($2,850,000)

FY 1974 $2,500,000; FY 1975 $2,850,000; increase $350,000

The Higher Education Projects Program encourages interdisciplinary programs, cooperative endeavors between institutions of higher learning (especially between two-year colleges and universities), and proposals that foster the study of the humanities in the professions. All two-year and four-year institutions of higher education in the country are eligible.

Although the number of requests for Higher Education Project grants has not increased significantly in the last year, the average size of the grant has increased from about $30,000 to $45,000 due to the greater scope of proposals. Thus, something over 45 Higher Education project grants are expected in FY 1974. At the requested funding level for FY 1975, this program will provide Project grants to about 55 or 65 institutions with about 20 faculty and 80 students participating in each. Projects will then be funded in nearly all fifty states and involve up to 6,000 students and 1,500 faculty. These figures, however, are merely the immediate audience. Projects will reach a significantly larger audience, due to the requirement for inclusion of a feasible plan for dissemination through scholarly or educational publications, films, or lectures. Institutions are

required to contribute a minimum of ten percent of total project costs; 75 percent of the grantees, however, contribute 20 percent or more. In addition one-fifth of project grants are awarded on a gifts and matching basis, matching private contributions on a dollar-to-dollar basis.

The Endowment has been supporting a number of higher education projects designed to improve instruction in the fields of American history, literature and politics. During the Bicentennial period, increased funding will be allocated to such projects, especially those that bear on the intellectual background, historic development, and consequences of the American Revolution.

Examples of Higher Education Project Grants

(i) The University of Iowa has received $29,232 to conduct a two-week institute in the summer of 1974 to examine the role of slave narratives in Afro-American culture. Thirty participants will be selected from colleges throughout the country with preferences given to applicants from less affluent and geographically isolated schools. They will attend lectures and discussions with such authorities as Benjamin Quarles, Ernest Gaines, and Margaret Walker. Through participation in this program college teachers will be assisted in developing courses in Afro-American history, literature and culture at their home institutions.

(ii) The University of Florida, Gainesville, has received $31,191 to develop an experimental program relating humanistic studies to the pre-medical curriculum through a sequence of two seminars, the first entitled "Literary Definitions of Life and Death," the second entitled "Humanistic Perspectives in Health Care." Advanced pre-medical students will participate in these seminars conducted by faculty representing seven departments of the College of Arts and Sciences and faculty from the medical school. Meetings are held in the classroom and in clinical settings when appropriate. The program evaluation will be used in developing a pre-professional curriculum integrating humanistic studies that could serve as a model for similar endeavors throughout the country.

(iii) The American Philological Association in Illinois received $83,000 for a project on "Classical Humanities in the American Republic." Sixty college teachers of American history and of the classics are to attend summer institutes in 1974 and 1975 in order to gain a deeper appreciation of the interrelationships of their subjects. In 1976 participants will conduct a lecture program on the subject for high school students, college and university communities, and adult groups. To reach an even wider audience, presentations will be videotaped for educational television and papers will be published in appropriate journals.

b. Elementary and Secondary Education Projects

FY 1974 $1,375,000; FY 1975 $2,200,000; increase $825,000

There are three areas in elementary and secondary education in which the Endowment has acquired experience and where distinctively humanistic tasks can be accomplished: the development of excellent curriculum materials by leading humanists and educators, the training of teachers in the use of these materials as well as in new ap-

proaches in teaching, and the activities of the National Humanities Faculty, which has already made a significant contribution to the collaboration of leading scholar-teachers with classroom teachers at the secondary level. Eligibility for funding extends to all elementary and secondary schools, both public and private, and to non-profit organizations.

Recent experience has indicated that the most successful elementary and secondary education projects are those concerned with the preparation of curriculum materials. Thus, in FY 1975, the Endowment is especially interested in encouraging large-scale elementary and secondary curriculum materials projects. The movement towards large-scale projects rather than smaller and more numerous projects results from our experience that the more successful curriculum materials projects have tended to be those designedly of large scope and impact.

Although there has not been a significant increase in the number of requests for elementary and secondary project grants in the last year, the average size of the grant has increased from about $30,000 to $45,000 due to the greater scope of the proposals. In 1974 about 10 project grants will be awarded. The requested funding for FY 1975 will support 15 major curriculum projects as well as maintenance of the present level of the National Humanities Faculty. Institutions receiving project grants are required to contribute a minimum of 10 percent of total project costs; at least 70 percent of grantees, however, contribute 20 percent or more. In addition, one-fifth of the project grants are awarded on a gifts-and-matching basis, matching private contributions on a dollar-to-dollar basis.

A priority in FY 1975 will be to develop improved curriculum materials for the teaching of American history. The intent is to produce materials that will draw upon recent research as well as introduce new approaches in teaching.

Examples of Elementary and Secondary Education Projects

(i) Davidson College, North Carolina, is conducting two four-week summer institutes to prepare a total of fifty African and Asian area specialists from colleges and universities in North Carolina to run in-service training programs for 3,000 to 4,000 teachers in local school systems thruout the state. The institutes will emphasize curriculum content and the use of teaching materials for the secondary school. Information about the project will be disseminated through established educational journals to curriculum specialists across the country.

(ii) The National Humanities Faculty (NHF) conducts a program that brings university professors and other humanists into a selected group of secondary schools who have applied for help. Teachers are enabled to enter into various types of discussions with professional humanists about their common concerns in the teaching of the humanities. In carrying out its work, the NHF conducts two types of projects. The first, the Individual Projects, bring humanists to schools for a total of 20 days of conference with teachers and administrators over a period of one year. The second, the three-year Thematic Project, involves 100 teachers from ninety schools in three consecutive summer seminars on curriculum, and entails a total of 30 days of visits by university professors to each of the 20 schools. In addition to these activities, NHF maintains a publishing program

that disseminates information on the teaching of the humanities to any schools making inquiries. By the close of FY 1974, NHF will have worked with over 225 schools in more than forty states. These currently include urban, suburban, and rural areas around the nation such as schools in Concord, California; Holland, Michigan; Atlanta, Georgia; Hote Villa, Arizona; Yazoo City, Mississippi; Waterville, Maine; Vergennes, Vermont; Portland, Oregon; Sheboygan, Wisconsin; Stephan, South Dakota; and Cambridge, Massachusetts.

(iii) Latin for the Modern School, Inc., Washington, D.C., is developing an elementary school Latin program specifically suited to a modern urban setting. The program includes texts and workbooks for the fifth and sixth grades, teachers' manuals, and a handbook on the organization of a Latin program. Research on a sixth grade Latin program developed by the project director indicates that training in Latin at that level results in increased English vocabulary and comprehension. Large-scale testing of the curriculum for both years (involving 1,000 students) will be followed by wide dissemination of the experience.

(iv) With a $5,550 grant from NEH the University of Colorado Museum is conducting a program to bring the museum to elementary schools in rural areas of northern Colorado as well as to Boulder, Fort Collins and suburban Denver. Museum presentations are coordinated with the curriculum at the teachers' request; Indian craft and culture is the most popular topic. Tours for school children are conducted in the museum as well. In both the tours and school visitations the program emphasizes sense perception of both natural history materials and objects in the museum's Southwest and Plains Indians collections.

3. Humanities Institutes ($2,200,000)

FY 1974 $2,200,000; FY 1975 $2,200,000; increase --

The Institutes program is designed to provide opportunities for the personal development of the individual scholar-teacher and for the translation of recent scholarly research into new interdisciplinary course materials. Three different types of activities will be conducted in the Institutes--faculty retraining, research, and the preparation of teaching material and courses--and their purpose is to relate each to the other in the work of the Institute's participants subsequently in their home institutions.

The need for this program arises from several factors. In recent years the tremendous expansion of research and the proliferation of scholarly writings in all the humanities disciplines have made it extremely difficult for the college teacher to keep up with developments in his or her own field, not to mention new research in related fields. Within the academic community, there is a new and great interest in interdisciplinary studies, and the Endowment has seen an increasing number of applications from institutions attempting to establish such programs, often unsatisfactorily. The chief problem is the lack of scholars capable of conducting interdisciplinary studies and the lack of adequate training facilities. Through its institutes and related activities, the Endowment helps create trained corps of instructors, and, in addition, assists institutions in developing interdisciplinary programs. The Institutes Program represents one way in which the Endowment fosters knowledge on the frontiers where it is often difficult for colleges and universities to move, particularly in the current financial crisis.

Planning for the Institutes began last year for implementation this fiscal year. The program will support the following:

a. Long-term National Institutes (@$1.8 million over three years): Generally housed within major universities, these institutes will bring together in residence, for periods of one year or more, groups of senior scholars and junior scholars drawn from a nation-wide pool, for concentrated study and teaching of designated areas in the humanities. The heart of each Institute will be a program of seminars on specific topics in fields represented by the Institute participants. In addition, Institute Fellows will plan and discuss new courses and programs and prepare model bibliographies and syllabi. Lectures, symposia, and team-taught courses on the topic of the Institute will be presented at some colleges throughout the region of the Institute. Endowment support will cover the salaries of a small permanent staff, fellowships or stipends, library materials, supplies, travel, indirect costs, and consultants.

b. Short-term National Institutes (@ $120,000 for two years): These will provide the same kind of high-level training offered in the long-term institutes to larger audiences over shorter periods of time, since for most college faculty the summers and long weekends are the only time when they are free to participate in such professional development activities. Included will be summer institutes running from four to six weeks, a series of short and long-term seminars, lasting anywhere from several days to four weeks, and traveling seminars or colloquia that would permit contact and collaboration among scholars located at diverse institutions.

In 1974 the program will support one long-term institute and two short-term institutes. The FY 1975 request will permit one long-term institute and two short-term institutes, and will involve representatives of 50 institutions, including 200 participants whose institute experience will directly benefit large numbers of people through subsequent courses in their home colleges. Institutions will contribute a minimum of 10 percent of the costs of the short-term institutes and 20 percent of the costs for the long-term programs.

Examples of Humanities Institutes Grants

Out of such examples as the following, and the perceived need for the encouragement of interdisciplinary courses of high quality, the Institutes Program has emerged. The following examples are not models of the kind of institute which this new program will encourage, but rather illustrate previous NEH experience with this format.

(i) The Newberry Library, Chicago, Illinois, in collaboration with 11 major midwestern universities, will develop, over a five-year period, a Center for the History of the American Indian. By offering financial support (approximately seven fellowships annually) and by making research materials available, it will encourage doctoral candidates to become specialists in the history of the American Indian and post-doctoral scholars to equip themselves to teach in the field. Also, each summer the Library will sponsor a summer institute for forty high-school teachers. In addition, the program will prepare three sets of bibliographies which will be made available to high schools, colleges, and Indian tribes and organizations. The goal of the project is to increase significantly the number of qualified scholar/teachers in the field of American Indian Studies.

(ii) An NEH grant is presently in the process of being awarded in support of a long-term institute on the subject of "The Humanities and the National Life." The institute would bring together senior and junior scholars from 20 colleges across the nation to engage in interdisciplinary study of the development of American society and values and to prepare instructional materials for use in American Studies programs of their own and other institutions.

4. Cultural Institutions Program ($750,000)

FY 1974 $500,000; FY 1975 $750,000; increase $250,000

In the past, the Endowment has received inquiries and applications from many libraries, museums, and other cultural institutions that have sought the Endowment's support for the promotion of the educational uses of their special resources. Until FY 1974, the Endowment responded to these inquiries and applications through its established programs, particularly the Education Projects program. For example, in FY 1973 the Education Projects program provided support for a cooperative project of the Folger Shakespeare Library and the school system of the District of Columbia to develop approaches and materials that will enrich the teaching of Shakespeare and the Renaissance in urban secondary schools. To take another example, the Education Projects program provided support for a 1973 summer institute for high school teachers from across the country, sponsored by the University of Maryland and the National Gallery of Art, to train teachers who wanted to introduce or expand art history in their high schools and to develop a curriculum for use by other high school art history institutes that could be set up on a regional level.

Although the Endowment's established programs successfully responded to some of the inquiries and applications from cultural institutions, they could not--because they were not designed to--fully respond to all such inquiries and applications, particularly since many of the inquiries clearly represented or suggested large-scale needs. Moreover, the Endowment's established programs could not help fully develop the potential of cultural institutions to become authentic and distinctive educational institutions. A step in this direction was taken two years ago when the Endowment supported a pilot effort by the Dallas Public Library designed to test the feasibility of using the neighborhood branch library as a local educational facility. In this project workers, homemakers and business people, aided by both library personnel and bibliographic resources, were able to structure and pursue their own course of academic study for which they could receive up to two years of college credit.

The Endowment's new Cultural Institutions Program is an experimental program specifically designed to promote the Dallas kind of project and other educational uses of libraries, museums, and other cultural institutions by helping, in FY 1974 and FY 1975, a small number of libraries and museums develop programs of sequential education. Each program is unified by a theme that is based on the collections of the library or the museum, the geographical area in which the library or museum is located, or the Bicentennial.

In FY 1974, the Cultural Institutions Program will be supporting the following kinds of activities:

(i) An educational program at a large library that is aimed at several different groups (for example, school children, senior citizens, and working people) and that offers both group and individual instruction in organized courses of study. (One program at

$85,000 for the first year and $80,000 per year for the second and third years. Total: $245,000.)

(ii) An educational program at a major museum that is aimed at several different groups and that offers both group and individual instruction. (One program at $85,000 per year for three years. Total: $255,000.)

In FY 1975, the Cultural Institutions Program will support two educational programs at libraries and two educational programs at museums, all designed to demonstrate the capability of local cultural facilities to provide continuing education in the humanities to a wide range of community residents.

FELLOWSHIP PROGRAMS (DEFINITE APPROPRIATIONS)

Activities	FY 1973 Actual	FY 1974 Estimate	FY 1975 Request	Increase or Decrease (-)
I. Residential fellowships				
1. College faculty Fellowships	-	-	2,600,000	2,600,000
2. Summer seminars for college teachers	819,989	1,280,000	2,400,000	1,120,000
3. Fellowships in the professions	781,303	1,150,000	1,500,000	350,000
4. Fellowships for advanced study	-	-	500,000	500,000
II. Independent fellowships				
5. Senior fellowships	1,655,062	1,700,000	1/	-1,700,000
6. Younger humanist fellowships	2,291,441	1,430,000	1/	-1,430,000
7. Fellowships in selected fields	432,000	550,000	1/	-550,000
8. Junior college teacher fellowships	600,050	660,000	1/	-660,000
9. Independent study fellowships	-	-	2,400,000	2,400,000
10. Summer stipends	424,000	500,000	400,000	-100,000
Total	6,993,846 2/	7,270,000	9,800,000	2,530,000

1/ Included in "Independent Study Fellowships" and "College Faculty Fellowships."

2/ Plus $400,000 in gifts and matching funds.

Fellowships are the means by which the Endowment helps individual scholars, teachers, and practitioners of other professions continue to increase their knowledge and understanding in the humanities. A fellowship permits the recipient to free himself from his customary academic responsibilities so that he may reflect, research, plan, and frequently write. Resulting articles and/or manuscripts make new contributions to humanistic knowledge; plans and reflections result in new approaches to teaching and other professional responsibilities.

The results of a fellowship are thus both immediate and long-range. At once, the opportunity for intensive study sharpens a fellow's insights, opens up new perspectives, and expands the scope and quality of the fellow's knowledge. And at the same time these new insights oftentimes provide that necessary vitality of perspective which is the difference between excellence -- in the classroom, in scholarship, in leadership to the fellow's profession -- and retiring mediocrity.

While these opportunities for intellectual growth are particularly important for the quality of work in the humanistic professions, the number of such opportunities available has always been disproportionately small. There are approximately 140,000 college and university teachers in the humanities. At the time the Endowment was established, there were fewer than 500 postdoctoral fellowships annually available to humanists, and this number has not since increased except for the fellowships offered by NEH. A relatively small number of leading colleges and universities has traditionally offered sabbatical leaves to faculty members, but that number has never been large and many institutions have been forced to curtail sabbaticals as a consequence of the economic pinch of recent years.

Entering this situation in FY 1967, the Endowment awarded 157 fellowships and 128 summer stipends for 1967-68 and has increased this number in FY 1974 to an estimated 376 fellowships and 706 awards for summer study -- a substantial increase in postdoctoral fellowship opportunities in the humanities. This growth in the NEH fellowship programs has been accompanied and, indeed, justified by a parallel growth in both the quantity and quality of individual applicants, whose number has jumped from about 1200 in FY 1967 to an expected 5700 in FY 1974.

In conducting its fellowship programs from 1967 to 1973, the Endowment responded to the initiatives of individual humanists who had discrete projects. However, experience has shown that, in addition to the many scholars who are interested in undertaking projects of original research and writing and who need an opportunity to explore their subjects independently and using widely scattered resources, there are many other scholars, indeed the large majority (including particularly teachers in the smaller colleges and junior colleges), who are primarily interested in refreshing their own learning and improving their ability to convey humanistic understandings to their students. These teachers are better served by the opportunity to meet with their peers in a collegial society -- there to pursue, with the stimulation of their fellows, a program of study which is enhanced by the human and physical resources of one major institution.

Accordingly, in FY 1973 NEH established the Summer Seminars which enabled college teachers to participate in organized programs of study at various universities around the nation. Based on the success of these programs -- as testified by both the senior scholars directing the seminars and the teachers participating in them -- and an

examination of the applications submitted to the established fellowship programs of NEH during the past three years, the National Council on the Humanities has recommended a restructuring of Endowment fellowship activities into six programs grouped into two broad categories: (1) residential fellowships, and (2) independent research/study fellowships.

I. Residential Fellowships

1. College Faculty Fellowships (15 institutional grants, 180 fellowships, $2,600,000)

FY 1974--; FY 1975 $2,600,000; increase: $2,600,000

The first category, residential fellowships, will be the Endowment's principal means of enabling individual teachers and scholars to develop their skills and knowledge. These individuals will be offered up to a year of guided study in residence at a selected university. The first and largest audience for these fellowships is the college teacher, whether it is at a two-year or four-year college or at a non-Ph.D. degree-granting university. For them, the fellowship offers a period in which to revitalize their understanding of some corpus of humanistic education and as a consequence of this period of retooling improve their capacity to convey the importance of humanistic learning to their students.

These fellowships will be awarded in clusters of twelve for an academic year of study under the guidance of distinguished scholars at universities with major library resources. They will involve a certain amount of organized study in the form of a discussion course or "seminar" for the twelve fellows during which the fellows will develop a familiarity with the resources of the host university; and they will provide an advisor to assist each fellow in pursuing a personal program of study for the year, assured of access to the resources of a major university library. The framework for this newly defined program grows out of the recognized need of many teachers especially from small colleges for the guidance of experienced scholars in organizing and pursuing their studies. This new college faculty program will subsume most of the projects carried out through the Younger Humanist, Junior College, and Selected Fields programs which will be discontinued as separate activities.

The FY 1975 request will permit 180 fellowships in this program, (Note: In 1974 about 180 fellowships will be awarded to support similar kinds of projects.) Stipends and allowances to the fellows will be fixed at $12,000 for the academic year, and grants will be made to the fellowship universities to cover the stipends and the costs of the programs. The institutional grants are expected to cover twelve fellows each and to average $175,000. Funds are requested for 15 such grants, a number which will enable fellowships to be offered in all major fields of humanistic study. Based on experience in the summer seminars program, a large proportion of these fellowships will go to junior college teachers, and a broad geographical distribution of awards can also be expected.

Examples of College Faculty Fellowships:

(i) An associate professor of English at Lehigh University in Pennsylvania will select from American literature those literary portrayals of Indian life which Indians themselves most value in order to increase the appreciation and understanding of white students for American Indian culture. Working under the guidance of a distinguished

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scholar of the American Indian, he proposes to carry out his study at the University of Arizona, which offers an unusually broad range of courses in the American Indian and furthermore provides ready access to such Indian reservations and tribal lands as those of the Navaho, Hopi, Papago, Hualapai, Fort Apache, San Carlos, Zuni, Jicarilla, Acoma, Laguna, and Mescalero.

(ii) An associate professor of philosophy at Bakersfield, a two-year college in California, will study ethics as applied to the fields of nursing and police science. Such a study will serve as the basis for courses in applied ethics. This is an attempt to move away from purely theoretical speculation and to derive specific, reasoned, and ordered ways of attempting to recognize and deal with moral problems. In this way the project seeks to integrate philosophy into the lives of people performing crucial services in their communities.

(iii) The role of the consumer in American social thought will be studied by an assistant professor of American Studies at Skidmore College. He plans to examine the debate, from 1890 to 1960, over such matters as the implications of a higher and more uniform standard of living, the survival of the individual in a mass society, and the role of the consumer (especially women) in a growing economy. He plans to work in a major library at an urban university, where he can draw on the published writings of business people, labor leaders, novelists, and social critics, making their perceptions intelligible for students and the reading public in terms of social patterns and intellectual traditions.

2. Summer seminars for College Teachers (60 seminars, 720 teachers, $2,400,000)

FY 1974 $1,280,000; FY 1975 $2,400,000; increase: $1,120,000

The purpose of these seminars is to provide opportunities for teachers in junior colleges, four-year colleges, and non-Ph.D. universities to study in their fields with recognized scholars at major universities. Meeting regularly throughout the summer with the seminar director and a small group of their colleagues for discussion and reflection, and with the resources of a research library available for their study and research, the college teachers sharpen their understandings and improve their ability to transmit their understandings to undergraduate students.

The first seminars under this program were held in the summer of 1973. They have proved thoroughly successful both from the point of view of the college teachers and from that of the administering universities and seminar directors. They have also yielded several important secondary benefits, particularly the establishment of ties between major universities and small colleges. Done on a large scale, this program will have a major impact upon the quality of teaching and standards of learning in the small colleges.

Each seminar involves twelve teachers, and funds are requested to increase the number of seminars from 34 in FY 1974 to 60 in FY 1975. The average cost of a seminar is $40,000, including stipends of $2,000 and housing and travel allowances of $250 for each teacher. The number of seminars requested will enable seminars previously limited just to history, English, and philosophy to be offered in all fields of humanistic study. Teachers come to each seminar from all parts of the country. The seminars, together with the College Faculty Program described above, will compose the Endowment's most broadly based fellowship program.

Examples of Summer Seminars:

(i) Professor Wesley Frank Craven, Department of History, Princeton University, "The Revolution as a Pivotal Development in American History"

Certain historiographical problems in the interpretation of the Revolution were an introduction to a review of modern historical literature pertaining to the Revolution's antecedents, development, and forward thrust. Each member of the seminar was given an opportunity to acquire a fresh acquaintance with the literature covering a broad span of early American history. The emphasis fell chiefly upon the eighteenth century, but individuals were encouraged to pursue their special interest pertinent to the general subject. Seminar discussions also dealt with the problem of classroom presentation, but the basic assumption was that effective teaching depends chiefly upon the teacher's opportunity to review and deepen his or her understanding of the subject taught.

(ii) Professor Larzer Ziff, Department of English, University of California, Berkeley, "Literature and Culture in America"

The seminar centered on a re-examination of major works in American literature as they relate to the broader culture. It explored methods by which literary works reveal the society's shared values, collective temperament, or perception of reality. The seminar was designed as a contribution to informing undergraduate instruction in American literature with a sense of the continuity as well as the shifts in American concerns about cultural identity, shared Western Civilization values, recognition of, versus assimilation of, minority cultures, and the meaning of literature in a mass democracy.

3. Fellowships in the Professions (17 grants, 36 fellowships and 168 summer stipends, $1,500,000)

FY 1974 $1,150,000; FY 1975 $1,500,000; increase: $350,000

Leaders in the non-academic professions -- journalism, law, medicine, etc. -- have an important influence on directions this country takes in all its affairs. Unlike scholars and teachers, whose work involves the advancement and transmission of knowledge, people in the professions are concerned with the application of knowledge and have not generally had the time to stand back from their work to examine its philosophical or historical foundations or its wider implications for the community and the nation. Nor have they generally been trained, in the professional schools, to perceive the humanistic dimensions of their work. The quality of the leadership of people in the professions and of professional-school teachers can be enhanced by a period of study designed to broaden and sharpen their humanistic perspectives. In addition to serving the commonweal, the effect should be to demonstrate to their colleagues the importance of humanistic understanding in their professional work.

Twelve fellowships were awarded last year to law teachers and 24 to journalists for study at three institutions during academic year 1973-74, and a like number will be awarded this year for 1974-75. Discussions with individuals in other areas of work, however, indicate that in most professions long-term fellowships are not feasible, and that short-term seminars offer the best kind of opportunities to practicing lawyers and physicians. Five such seminars are planned in FY 1974. The request for FY 1975 will permit 14 seminars with participants from two new professions, in addition to the three

fellowship programs for journalists and law teachers at their present levels.

Stipends in these programs are salary-matching up to $1,500 per month. Grants are made to the host institutions and cover stipends and allowances to fellows and seminar participants plus the costs of offering the fellowship or seminar program. The total cost of the fellowship programs averages $275,000. The anticipated average costs of the seminars is $50,000. The programs are open to applicants on a national basis and the recipients of the first fellowship awards were well distributed throughout the country.

Example of fellowship programs in the professions:

The program for practicing journalists at the University of Michigan provides for 12 fellowships for the full academic year. The Fellows are not candidates for a degree but pursue individual programs of humanistic study under the guidance of a faculty advisor in the fields in which they are working. In addition, the Fellows attend two weekly seminars expressly organized for them: (1) "The Changing Media in a Dynamic Society," conducted by the Director of the program (Professor Ben Yablonky of the Department of Journalism) in which visiting journalists and members of the University Journalism faculty discuss issues of concern to the profession, such as "The First Amendment and The Press," and in which Fellows themselves present papers for seminar discussion, and (2) "Contemporary Problems and Humanistic Perspectives," in which distinguished humanistic scholars from their departments of the University serve as seminar leaders and discuss the profession from their own perspectives. For example, a Professor of Classics is expected to lead a seminar discussion of urban problems and development in the ancient city, demonstrating that factors which the Classicist sees as major influences are perceived differently by the sociologist, politician, or newsman. The program is administered by an 11-member, University-wide Faculty Committee together with the Director.

4. Resident Fellowships for Advanced Study (10 centers, 50 fellowships, $500,000)

FY 1974--, FY 1975 $500,000; increase: $500,000

The nation's great centers for advanced study and the major research libraries and museums offer opportunities to our leading scholars not only for work in their own fields but also for extended discourse with other resident scholars working in other fields, and hence for interchange of ideas at the deepest levels of understanding. The purpose of this program is to enable these centers to provide such opportunities to an optimum number of humanists -- at the same time strengthening the centers by stimulating the fullest use of their resources for study in the humanities and, in many cases, creating a fruitful balance between humanists and social and natural scientists at the center.

The number of centers capable of providing this kind of opportunity is limited. They include the well-known independent centers for advanced study, a few smaller centers of narrower scope, the independent research libraries, the major museums, and a few outstanding university-related centers. The optimum numbers of fellowships and the average amounts of individual fellowships will vary greatly.

The FY 1975 request will provide support to 10 centers during the first year of the program at an average grant of $50,000.

II. Independent Research/Study Fellowships

5.-8. Senior Fellows -- Younger Humanists -- Selected Fields -- Junior College Teacher Fellowships (FY 1975 --)

FY 1974; $4,340,000; FY 1975 --; decrease: $4,340,000

These four programs will be phased out as separate activities at the end of FY 1974 and will be replaced by the Independent Study Fellowships described below and the College Faculty Fellowships programs described in the preceding section.

These Independent Research/Study fellowships are for the individual with a specific and important project of humanistic investigation requiring full-time pursuit; they are therefore limited to senior scholars or promising young scholars who can work independently and who can make significant contributions to humanistic knowledge. In this broad sector, the length of the planned investigation determines whether the individual will seek an independent fellowship or a summer stipend. Through these two broad categories of aid the Endowment will reach an even wider spectrum of individual humanists, whether they seek to research, retool or explore the humanistic impact of their work; whether they come from the ranks of the younger scholar or the established professor; whether they work in the junior college, the four-year college, the university, or in an occupational area outside the academic profession.

The number of awards made available through the NEH programs will still be small in relation to the number of college and university teachers and other humanists who could make effective use of such opportunities, but it is a number which will nevertheless have substantial and wide-ranging impact upon humanistic learning and understanding.

9. Independent Study Fellowships (160 awards, $2,400,000)

FY 1974--; FY 1975 $2,400,000; increase: $2,400,000

This program offers opportunity for independent study and research by scholars with projects which give promise of making significant original contributions to humanistic knowledge. Formerly, fellowships for independent study and research were offered under four separate programs where equal attention was given to an applicant's abilities as a teacher and interpreter of knowledge. Most of the awards have gone to persons whose interests lay primarily in gaining new knowledge and deepened understandings which would be useful to them as teachers rather than in intellectual undertakings requiring the highest originality. Such applicants will now be eligible under the Resident-Fellowship program; thus, the 160 fellowships proposed for Independent Study Fellowships in FY 1975 represent, not a cutting back of support for significant original study, but a continuation of support for such study at the current level.

While these fellowships will be broadly distributed in every way, the sole criteria for selection will be significance and originality. The point of the program will be to enhance the body of humanistic knowledge as much as possible. Stipends will be salary-equivalent up to a maximum of $1,500 per month for up to 12 months.

Examples of Fellowships

(i) The moral foundations of China's renascence will be studied by a professor of Far Eastern history at Southern Illinois University. Born in China and naturalized here in 1959, Professor Kuo believes China's renascence cannot be understood in its profundity through

Western theories and precepts. By focusing on the human factor and the moral forces, with constant reference to the character and psychology of the Chinese people and their specific environment, he hopes to introduce a perspective which will be helpful to all those interested in improving East-West relations. He plans to present his findings in book, lecture and article form.

(ii) In 1967 an associate professor of history at Duke University combined social, cultural, intellectual and political history in a study of how the Southern woman perceived her role as plantation wife and broad-gauge administrator and how her role influenced the Southern white man's definition of his responsibilities and style of behavior. Her book, The Southern Lady: from Pedestal to Politics, issued by the University of Chicago Press in 1970 (and in paperback in 1973) proved, according to one critic, that "intelligent and imaginative women's history is at last being written." Equally important was the widespread opinion that the book "is a path-breaking volume which will undoubtedly influence future writings in a virgin field heretofore barely touched." (Quotations from George Frederickson in The American Historical Review, 1971, and Monroe Billington in West Virginia History, 1972.)

(iii) A professor of humanities at Stanford University received a fellowship for the year 1972 to write a critical biography of Bernard DeVoto (1897-1955). The best-known literary figure and most distinguished historian of the Rocky Mountain West, DeVoto was also greatly influential as a novelist and critic. In "The Easy Chair," his monthly column in Harper's magazine, he spoke out for two decades (1935-1955) on many issues -- literary censorship, political snooping, conservation, shoddy products -- which are as alive today as they were in those years. The biography, The Uneasy Chair, published early in 1974 by Doubleday, was praised in Time magazine as "one of the best-written biographies 1974 will see. It consistently goes beyond the limits of its subject to illuminate what it meant to be a writer in the America of the 30's, 40's, and 50's." (Time, February 11, 1974, page 78.) In his review in the New York Times Book Review, Malcolm Cowley commented that the author was "an ideal biographer for DeVoto" since both had been brought up in Utah and both, as the author says, were "novelists by intention, teachers by necessity, and historians by the sheer compulsion of the region that shaped us." (Times Book Review, February 10, 1974, pages 1 and 2.)

10. Summer Stipends (200 awards, $400,000)

FY 1974 $500,000; FY 1975 $400,000; decrease $100,000

These small grants of $2,000 are awarded to college and university teachers to free them from the necessity of summer teaching and to enable them to carry out individual projects of study, research, and writing. Because of a limit of three per institution, the awards are assured a wide distribution. The program has been particularly helpful to scholars in the smaller colleges and universities. A spin-off benefit of the program is the attention it calls to the value of summer study and the benefits to the colleges and universities of providing institutional funds for this purpose. The decrease in the number of awards proposed for FY 1975 reflects an intention to limit this program to the support of original scholarly work while still providing opportunities for intellectual refreshment to college and junior college teachers through the program of Summer Seminars described above. The distinction between the Summer Stipends and Summer Seminar programs parallels that between the Independent Study and College Faculty Fellowships programs.

Examples of Summer Stipend projects:

(i) The Pagets, a 19th-century English family in science, education, and the church, were studied by an assistant professor of history at Indiana University. She is relating the development of the family over three generations to the larger problems and issues of 19th-century social and intellectual history, such as the impact of Darwin, developments in science and education in the universities, and the changing place of religion and the church in English society. The stipend enabled her to spend the summer in London completing a survey of the sources for her study and their locations and undertaking the first stage of her research. Directly related to her teaching, this project should help her students better understand the influences that shape social life and history.

(ii) An associate professor of art at Berea College in Kentucky will study the arts of Appalachia. He plans to spend the summer searching out Appalachian craftsmen, musicians, writers and storytellers, buildings and objects, then recording, photographing, collecting, and making notes of them. As a result of this study, he hopes to be able to present to his students, and later to the general public, an understanding of the rich heritage of indigenous art of all kinds found in Southern Appalachia.

(iii) An assistant professor of art at Northeastern University in Massachusetts studied the life and work of Le Corbusier, the great architect. He spent the summer working in the archives and research centers of three European countries, and he interviewed more than a dozen friends and associates of Le Corbusier, including the architect's brother. As a result of the summer's work, he completed much of the research for a critical monograph on Le Corbusier.

RESEARCH GRANTS PROGRAM

(Definite Appropriation)

Activities	1973 Actual	1974 Estimate	1975 Request	Increase or Decrease(-)
1. Research grants	$4,408,540	$3,290,000	$4,000,000	$ 710,000
2. Editing grants	749,523	1,025,000	1,500,000	475,000
3. Research centers	135,470	725,000	800,000	75,000
4. Research tools	1/	800,000	2,200,000	1,400,000
5. Congresses & conferences	--	200,000	1,000,000	800,000
6. Bicentennial history program	--	300,000	750,000	450,000
7. State history program	--	200,000	1,000,000	800,000
	5,293,533 2/	6,540,000	11,250,000	4,710,000

1/ Included in "Research Grants."
2/ Plus $4,405,281 in gifts and matching funds.

Research in the humanities -- the study of human ideas, values, beliefs, and actions in the past as they have revealed themselves in literature, philosophy, the fine arts, history and its associated disciplines, and in the humanistic social sciences -- is vital to man's understanding of his world and of his relationship to it and to his fellowmen. The main purpose of the Endowment's Research Grants Program, therefore, is to provide support of American scholarship in the humanities: to support the discovery of new knowledge in the humanistic disciplines, which are the foundation of our educational system; to aid projects to reconsider and revise old knowledge to show anew its bearing on the rapidly changing circumstances of our times; and to support, on a selected basis, the refinement of scholarly knowledge into forms appropriate to the interests and needs of the general public. A central consideration is the potential relevance of proposed projects to the general public understanding of problems of current national concern. Such proposals are encouraged by the Endowment and given the highest priority in the hope of giving humanistic research the greatest possible practical as well as scholarly and educational significance.

Research grants often include matching provisions to generate support for the humanities from philanthropic foundations or private individuals. Support from these sources has risen dramatically: in FY 1969 over $276,000 was granted on a gifts and matching basis; in FY 1971 over $828,000; in FY 1972 $3.3 million and in FY 1973 $4.4 million was granted in gifts and matching, almost as much as was granted on an outright basis, eloquent testimony to the effectiveness of NEH funds in enlisting new sources of support for the humanities.

It is clear, however, that the number and cost of research applications will continue to increase in FY 1975, although the higher level of funding requested will not allow general program expansion. Indeed, the overall grant making is likely to fall from the past year's average of one out of six applications to one out of seven or even eight.

At the same time it should be emphasized that the funding for the research program has been deliberately kept at low levels during the past five years in order to concentrate the limited appropriations available on other program areas considered most pressing. The need to redress within colleges and universities the imbalance resulting from heavy Federal investment in the sciences and the need to create a basic program capability in the public sector, where there had been none, has required NEH to devote the major part of new funds to areas served by the Education and Public programs, leaving less than adequate funds for research. Thus applications for research grants were discouraged either directly or indirectly as the Endowment's priorities became known to the scholarly community. And thus humanities scholars have continued to have available to them less than one percent of the research funds available to scholars working in the sciences.

While expanded support for research is clearly justifiable simply on the basis of the rising quantity and quality of applications, it is rapidly becoming essential if the advances made in strengthening educational and public programs are to be fully secured and if the opportunities for further progress are to be fully exploited. Basic to curriculum development and the design of new courses in areas like urban and minority history or the technological impact on society and basic to the production of historically accurate programs for tele-

vision is knowledge, specifically humanistic knowledge, which only trained humanities scholars can produce.

The Research Grants activities for FY 1975 will fall into seven separate programs, several of them separated out this year from more general program categories. These programs are research grants for general purpose research, editing grants, support for research centers, the development of research tools, support in the Bicentennial period to international scholarly congresses and conferences, the preparation of historical guides for popular dissemination in each state by the year of the Bicentennial, and a program designed to lay the foundation for a comprehensive state history program by assessing and organizing local, state and regional historical and archival resources.

To implement these major programs most effectively in the national interest, two principal policy changes will be effected in the Endowment's Research Grants program next year. First, projects involving essentially a one-person investigation will no longer be supported within this program; rather these projects will be considered in the "Independent Study Fellowship" program described in the previous section. This change is designed partially to simplify the administration of small individual projects (thus reducing costs), and also, more importantly, to concentrate research support on significant collaborative projects which will raise the state-of-the-art of humanistic research and significantly strengthen a broad field of study.

The second, and related, change is to give greater focus to the research grants program by establishing specific priority areas and soliciting applications for work in these. The effect of this change will be to keep the general purpose program at a low level of funding while directing more support to the editing, research tools, and the new Bicentennial and state history programs. A major part of research grants support next year will be reserved for studies and projects relating to the American Revolutionary period and the succeeding two hundred years of American life.

1. Research Grants ($4,000,000)

   FY 1974 $3,290,000; FY 1975 $4,000,000; increase $710,000

2. Editing Grants ($1,500,000)

   FY 1974 $1,025,000; FY 1975 $1,500,000; increase $475,000

Research Grants and Editing Grants support basic work in thirteen major fields and ninety-three areas of scholarly specialization by individual scholars and writers (who may or may not hold academic positions), by consortia of scholars and of institutions, and by learned societies or organizations which sponsor projects looking to the advancement of knowledge.

Since the Endowment's creation, an effort has consistently been made to seek out and support research on subjects relevant to the Revolutionary era, on American history, and on ideas and social evolution generally. The massive effort by the Modern Language Association to edit and publish definitive editions of the writings of our classic nineteenth-century authors is the most striking single example of this effort, but scholarly biographies and editions of the letters and papers of such outstanding Americans as George Washington, Thomas Jefferson, George Mason, Elbridge Gerry, John Jay, John Marshall, Robert Morris, Daniel Webster, Booker T. Washington and Louis

Brandeis, among others, promise to add much to our understanding of the American experience. This emphasis will be maintained during the next few years. Meanwhile, support for research and editing projects in other fields runs the gamut from archaeology and anthropology, seeking discovery and surer understanding of our remote past, to research in the history of science, technology and urbanization which look to increasing our knowledge of problems urgently confronting contemporary man. To take one example: completion with Endowment support this year of Professor E.A. Gutkind's eight-volume History of Urban Development will provide historians as well as town planners and interested individuals with the first authoritative and comprehensive treatment of this great subject. Gutkind's History is an example of the way Endowment grants to scholarship can serve practical purposes.

Other examples of Research grants include an account of the development and emergence of regional and minority culture in the United States; a study of the impact of the national news media on society; a study in American family and individual adjustment to urban industrial life, and support to the American Film Institute in Washington, D.C. for the purpose of cataloging the Nation's films dating from 1893.

The request for increased funding for this category of grants reflects Endowment concern to provide continuing support for projects already under way--the growing momentum of the American author project will require over $500,000 next year if its production goals are to be reached--and to be able to provide initial support for the greater part of all new projects rated "excellent" by our reviewers and the National Council. (At the present time about one-third of such projects can be funded.) The request for 1975 will support 125 research projects at an average of $32,000 and 20 editing projects averaging $50,000, in addition to the American authors series.

3. Research Resource Centers ($800,000)

FY 1974 $725,000; FY 1975 $800,000; increase $75,000

The Research Resource Center Program provides support of major research collections and centers for related scholarly activities which, with the universities, are responsible in large degree for advances in American humanistic research over the last two decades. By concentrating scholarly materials and by giving clear focus to the collaborative scholarly efforts of individuals, a center greatly encourages and efficiently accelerates the development of new and established fields of study.

Almost without exception the great national collections are privately supported -- the Research Collections of the New York Public Library, the Folger Shakespeare Library in Washington, the Newberry Library in Chicago, the Huntington Library in San Marino, California, the Russian Research Center at Harvard, the East Asia Research Center at Ann Arbor, etc. With endowment incomes shrinking from inflation, and support from the private foundations dropping off as their interests periodically shift focus, the situation of these research centers is perilous. The Endowment is committing $725,000 in support of such centers in the current fiscal year, and only a slight increase is planned for FY 1975 in order to support about seven center projects. A large portion of NEH support will be through matching funds in order to encourage the centers to broaden their base of support.

An example of such support is the grant made to the Folger Shakespeare Library in Washington. NEH support will enable the Library's

staff and Trustees to concentrate their energies and skills over a three-year period on the preparation and implementation of a long-range development program designed to afford a substantially improved financial base for the Library's future.

4. Research Tools ($2,200,000)

FY 1974 $800,000; FY 1975 $2,200,000; increase $1,400,000

This program offers support for research tools -- bibliographies, catalogues, encyclopedias, dictionaries, atlases, etc. -- which are the most essential reference works for research in the humanities. Hitherto tools projects have been funded from the general Research Grants program; however, the increasing number of applications for these works, the sizable cost of producing them, and their absolutely fundamental value to humanistic research suggest the creation of a separate program so that all such proposals may be justly reviewed on a competitive basis and limited funds be concentrated on the most essential. The Dictionary of American Regional English and the Atlas of Early American History are two of the few but vitally important tools projects the program has been able to support out of its limited funds for such purposes. Establishment of this program on a substantial basis will benefit not only today's scholars, but generations of Americans to come. Investment in research tools is one of the Endowment's surest ways of investing in the nation's humanistic future.

The increase in this program item is at once the largest change requested year-to-year and the most important in terms of the Endowment's policy. Two years ago a request was made of the American Council of Learned Societies to canvass its thirty-odd constituent societies as to the basic research tools most needed in their various disciplines, costing the recommended projects and themselves assigning priorities to those recommended. An ACLS committee culled from some 250 recommended projects a reduced number of 110 of the highest priority. This survey is the most far-reaching and authoritative ever undertaken by American humanists. It represents the best available professional advice on the basic research needs of the humanities over the near future. The FY 1975 request is for first year support at the minimum projected cost bases of a selected number of these long necessary works.

5. Conferences and Congresses ($1,000,000)

FY 1974 $200,000; FY 1975 $1,000,000; increase $800,000

In recognition of the American Bicentennial, many of the congresses and conferences that groups of scholars and professional societies generally hold elsewhere in the world will be scheduled in the United States. The Endowment already is contributing matching funds for a meeting of The International Association for the Philosophy of Law and Social Philosophy in St. Louis in 1975. The Endowment projects support to the American Historical Association for a World Congress of Historians in San Francisco in 1975, and the officials of the International Society for Enlightenment and Eighteenth Century Studies have received support for a session at Yale University also in 1975. A half dozen such meetings of scholars are known to be under planning and more will be.

These international sessions will be important means for gaining increased recognition of American scholarship, and for enabling American scholars to benefit from the perspectives of others. Because they had felt isolated from the main currents of scholarship in the West,

American scholars played important roles in forming many of the international associations of specialists that now exist, and meetings here offer our learned societies a chance to repay hospitality accorded them at conferences abroad funded through ministries of education and other foreign government agencies. No other scholarly activity offers more direct, rapid opportunity to American humanist scholars to keep current with world-wide research in their fields, and to convey new knowledge and insights to their students and to the general public.

The FY 1974 request will aid in the planning of 6-12 international meetings in this country. With an average attendance of about 1,300 at each session, the program ultimately promises a valuable exchange of ideas among approximately 10,000 to 20,000 American and foreign scholars, including the leading figures in the humanities from around the world.

6. Bicentennial History Program ($750,000)

FY 1974 $300,000; FY 1975 $750,000; increase $450,000

In recent years there has been a remarkable growth of interest among the general public in local, regional and state history. (This is especially true among young people, almost 21 percent of whose applications for Youthgrants have been for projects in local and regional history.) Yet the traveler in the U.S., well informed about where to sleep and eat and the fastest way to get there, is given little sound information about how what happened in any location 100-200 years ago may have influenced the course of this society and, therefore, his own life. This country still has no counterpart of the excellent historical guides available in Europe which are regarded as essential traveling companions by many Americans when touring abroad.

In view of the sharply increased mobility of the American public and the anticipated growth in numbers of foreign visitors, the preparation of solid but appealingly written historical materials becomes a pressing necessity, especially at the time of the Bicentennial. To meet this need the Bicentennial History Program through the American Association of State and Local History is supporting the production of a series of popular histories of each of the states, the District of Columbia, and the territories. The volumes will be interpretive essays characterizing the people of a given state historically. Each book, which will average about 150 pages, will reflect the most recent scholarship of historians, folklorists, and archaeologists, but will be written for the general reader. The guides will both inform citizens about the history of their states, and enable them to explore in a serious way the significance of that history for the individual and the nation as a whole. This program looks ultimately to providing about $30,000 per state to support the research, writing and editorial costs of producing such interpretative historical guides in time for the Bicentennial celebrations in 1976. In addition to the major project administered by AASLH, it is anticipated that a number of smaller but analogous projects growing from private or scholarly initiatives will be supported with the requested funds.

7. State History Program ($1,000,000)

FY 1974 $200,000; FY 1975 $1,000,000; increase $800,000

Our best and leading scholars have given their attention almost exclusively to the study of Federal and national history to the serious neglect of state and regional history. At a time when the nation is commemorating the original union of states and at a time

when the general public seeks a fuller understanding of the way in which the history of their localities and states relates to the complex history of the nation as a whole, there is a clear and pressing need for definitive scholarly histories of the fifty states. The Endowment, therefore, plans support to a major effort over a long period to produce authoritative and up-to-date scholarly histories of each state.

This program, developed in collaboration with learned and professional organizations (including the American Historical Association, the Organization of American Historians, the Society for the Study of American Law and the Society of American Archivists), will support projects designed eventually to bring the level of state histories up to that now enjoyed by Federal history, and secure the production, over a decade, of a series of authoritative state histories comparable to the Victoria County Histories of Great Britain.

However, the quality and completeness of extant sources as well as their accessibility to scholars varies greatly. Thus, a comprehensive program to inventory historical sources and archival material at the state, county and municipal levels is first required in order to bring them under adequate bibliographic control and to increase their availability to researchers. Work towards this end will begin in FY 1974. This project, funded primarily through the Society of American Archivists, will make possible the survey and organization of these largely scattered and vulnerable records in each State. Expanded archival work and a pilot project to begin the preparation of a history of one or two states will also be undertaken in FY 1975 where the necessary materials are found to be already sufficiently well catalogued and accessible. Experience gained from the pilot projects will be useful in developing schedules for the long-term costs and personnel requirements involved in producing the kind of authoritative history needed fully to explore and document the development of the nation, state by state, and establish thereby a permanent resource.

PLANNING: DEVELOPMENT, EVALUATION AND DISSEMINATION

(Definite Appropriation)

Activities	1973 Actual	1974 Estimate	1975 Request	Increase or Decrease(-)
Development Evaluation and analytical studies Dissemination	$989,502[1/]	$3,139,577[1/]	$3,700,000	$560,423
Youthgrants	202,472	400,000	650,000	250,000
Total	1,191,974[2/]	3,539,577	4,350,000	810,423

1/ Includes funds for grants and contracts in furthering pilot programs as well as "program development and evaluation funds," not to exceed three percent of Endowment appropriations, for the support of panelists, consultants, printing and information services in connection therewith.

2/ Plus $684,002 in gifts and matching funds.

As the Federal government, through the Endowment, becomes a more important and sustained sponsor of humanistic activity, it is even more essential that the Endowment remain open to new ideas; that it actively seek out and, where necessary, initiate new ways of acquiring and applying humanistic knowledge and more effective means of involving larger numbers of people in humanistic study; and that it continually attempt to evaluate the impact of its own efforts and disseminate information about successful activities carried on by other organizations. Traditionally, about five percent of total definite funding is allocated to these functions, responsibility for which is vested in the NEH Office of Planning.

As the principal staff arm of the Chairman of the Endowment, the Office is charged with advising him on matters of policy and program development. To facilitate its performance in these roles it assumes five general operating functions: it designs and supports pilot projects which, if successful, may be transferred to and become regular operating programs of one or other of the program divisions of the Endowment; it provides for evaluation of NEH funded projects and for special studies on needs in the humanities; it administers the Endowment's "Youthgrants" program, which supports student and youth projects; it coordinates the "Science, Technology, and Human Values" program which supports work concerned with the ethical issues arising from scientific advances; it publishes the Endowment's newsletter, Humanities, and conducts the Endowment's dissemination program, publishing information about work in the humanities generally.

Except for Youthgrants, the Office of Planning does not conduct formal programs of the Endowment, however, and the following headings

are intended only generally to indicate the kinds of activities which the office undertakes and an approximate allocation of Endowment funds which may be anticipated for such functions in FY 1975.

Development ($3,000,000)

The Endowment's major priorities for development have been, and in FY 1975 will continue to be (1) non-traditional study and continuing education, (2) designing programs for special groups in the population not normally involved in the humanities, and (3) identifying critical issues confronting American society to which humanists should be encouraged to speak. Current and projected efforts in these various areas are described below:

1. One of the most remarkable adventures in public education was launched on September 30, 1973, when more than 250 newspapers, with combined circulation of over 20 million, began to bring "Courses by Newspaper" to their readers. The first course is "America and the Future of Man," comprising a series of printed lectures, developed by distinguished scholars from the humanities and related fields of learning, which have appeared once a week for 20 weeks, examining the present situation and future direction of American society. The course is aimed at three audiences:

(a) the casual newspaper reader, who, it is hoped, will be stimulated by the lecture to reflect upon and discuss with family and neighbors the issues treated in each article;

(b) the reader who wishes to explore the subject further and who will be aided by an inexpensive kit of supplementary study materials; and

(c) the reader who wishes to do serious, in-depth study and receive college credit, which he or she may do through arrangement with a college in the area where he or she will be able to obtain supplemental study materials, meet with fellow course participants in occasional seminars, and take a college-level examination.

The project was originally planned for 10 cities, but the initial announcement of the course generated such an enthusiastic response from the nation's newspapers and colleges, as well as the general public, that communities in nearly every state are participating in the initial program.

To assure thorough testing of its concept, "Course by Newspaper" will continue through FY 1974 with a second course on visions of American society as reflected in the works of American writers and statesmen. Extensive evaluation of the project will be undertaken and is expected to yield results by the late spring of 1974.

If these results are favorable, the project will be continued into FY 1975 in order to develop and disseminate by 1975-76 a formal course of study on American culture and civilization. This would assure opportunity for that part of the population -- especially institutionalized persons or those living in relatively isolated areas -- who cannot enroll in traditional educational programs yet would like to engage in serious, disciplined study of the American experience. Cost of the course is estimated at $300,000.

2. Through a recent grant made to the Aspen Institute, the Endowment has continued to involve itself in the exploration of the various uses of the electronic media for continuing education in the humanities. The Aspen grant has focused on the development of humanistic uses of cable TV, but in the discussions with business leaders, scholars, and educators on the uses of the cable, other media have also been suggested for more intensive exploration -- commercial and public TV, radio, cassettes, and the port-a-pak camera. The Endowment is now receiving proposals for the development of humanities courses on television and is also studying the use of the radio for extension education.

It is regrettable that utilization of these media for formal adult education has, thus far, not achieved the kind of effectiveness and public acceptance attained by children's television, for example, Sesame Street. Indeed, "Instructional television" in the humanities has usually meant simply televised instruction, with the professor lecturing at the TV camera. It is, of course, understandable that the treatment of complex ideas, which characterize study of the humanities, poses far greater difficulties than education in basic skills such as reading; and research, development and testing of solid educational programs which exploit the unique capabilities of electronic media are expensive. A televised course equivalent to a college semester course is estimated to cost about $1 million, but once produced, an effective course by media can reach thousands, if not millions, of persons, both on and off the campus, thus extending the walls of the university and eventually paying off the costs of the course's development.

In FY 1974 the Endowment is allocating $400,000 to the systematic development of instructional courses via the media. This effort will require bringing together all essential human resources -- technical production experts, educational psychologists, and humanities scholars -- to design a course incorporating broadcast programs, study materials, community seminars, and occasional direct teacher contact through a nearby college. The FY 1975 request includes $1 million to translate the design of one course into an operating program.

3. In fiscal year 1973, the Office of Planning undertook the role of encouraging increased humanistic attention to ethical and value implications of new developments in science and technology. A Program of Science, Technology and Human Values has been established and NEH, jointly with the National Science Foundation (NSF), has solicited research and educational proposals in this field, expertly guided on program approaches and priorities by a specially formed Advisory Committee.

In the Endowment, the new Program encourages and correlates activity through all the Endowment's established programs -- fellowships, research, formal education, public education, and Youthgrants as well as directly supporting specially designed projects through Office of Planning funding. These latter have included grants to the following: Georgetown University (Kennedy Center for Bioethics) to prepare an encyclopedia of medical ethics; Harvard University (School of Public Health) to collect and prepare case studies in medical ethics, and to provide professional training in the formulation and instructional uses of case studies; New School for Social Research, New York, Dr. Hans Jonas, Professor of Philosophy, to support work on a book to set forth ethical norms in biomedicine; Dr. Leon Kass, Annapolis, Maryland, to undertake studies on the historical meanings

of "organisms" and of "health" to throw light on current understandings of bioethics.

The deep concerns prompting special efforts in this area arise because of perplexing issues of human dignity, rights and values which result from recent scientific and technological advances. Particularly awesome examples are in the fields of medical and biological research and practice: organ transplants, psychosurgery, genetic prediction and "engineering," experimentation on human subjects, reproduction control, and prolongation of life. The Endowment feels a distinctive responsibility for assuring that the best humanistic thinking be brought to bear on these critical issues. The Endowment's purpose here is to stimulate and assist humanists -- from disciplines such as history, literature, philosophy, ethics, jurisprudence and comparative religions -- to contribute their knowledge and methods of reasoning, in assessing the human import of scientific onrushes (perhaps engulfments).

The fiscal 1974 amount tentatively stated for support of specially designed projects in the science-values area is $500,000. In view of the rapidity with which new issues are arising, it is proposed to approximately double this amount in fiscal 1975 up to $1 million in order to support a variety of interdisciplinary work in research, training, education, and public-oriented programs.

4. The creation of the Youthgrants program in 1972 was an attempt to assure Endowment attention to a specific group in the population which had not before played an active part in NEH activities. Lack of participation or passive participation in the humanities, is, of course, not confined to young people. Blue collar workers and senior citizens, among others, have been neglected by humanists as potential audiences for the humanities or, at best, have been offered opportunity only for a humanistic education designed for middle class youth. In FY 1975 the Endowment will seek to correct this situation by undertaking special activities aimed particularly at these two groups. Some exploratory work with labor unions is taking place this year.

Endowment concern for the aged is based on several considerations: Senior citizens are often considered retired not only from work but from active intellectual life. Recently, however, interest in the aged as a distinct group has begun to develop. Sociologists are studying death and dying; and psychologists have taken to examining the effects, both biological and institutional, on the aging individual. Regrettably, few humanists have thus far addressed themselves to the aged either as a field of study or as a natural constituency for the humanities. On the belief that skills and interest in humanistic knowledge does not wane with years -- rather, the exposure of a lifetime evokes a deeper richness in the necessarily acquired wisdom of any variant of cultural study -- the Endowment plans special attention to the particular educational interests and problems of older people next year. This attention will take several forms: (1) encouraging humanists to examine the role of the aged in American society in order to broaden and inform the research conducted by social scientists; (2) supporting the development of special humanities programs and projects appropriate to the interests of older people; (3) exploring the utilization of older humanities teachers and scholars who, though retired from full-time occupations, may nevertheless still desire, and be capable of, productive work, especially in informal community programs for other individuals of their age; and (4) investigating possible programs bringing young and old people together in common exploration of basic human questions.

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Evaluation and analytical studies ($400,000)

Sound programming depends on critical evaluation, and that evaluation is no less necessary than it is difficult in an area such as the humanities, which defies the usual standards of quantifiable measurement. Equally important to making sound program decisions is information about the humanities universe, about its needs, and about the human and material resources of other institutions providing support for the humanities. Because of insufficient staff and funds, the Endowment has not until this year been able to build the systematic, sustained capability necessary to provide continuing information on the results of its grants or to examine the implications of other crganizations' activities.

In FY 1973 a formal, organized Evaluation Program was instituted within the Endowment, responsibility for the program being vested in a senior level Evaluation Officer. When fully established, the program will comprise three activities:

1. analytical studies of the present status of and needs in the humanities;

2. program evaluation studies to assess the impact and effectiveness of major NEH activities; and

3. studies of selected, representative grant projects which may have bearing upon subsequent requests for Endowment support.

Evaluation work in FY 1974 is being concentrated in the latter two categories. The FY 1975 request includes a large increase in funds for evaluation and analytical studies in order to undertake basic research to improve the "state of the art" of humanities evaluation, studies to identify current needs and trends in certain institutions (with priority to be given to two-year colleges and libraries), and specific evaluation of two NEH programs to be performed through contract with outside experts.

Dissemination ($300,000)

The Endowment's dissemination activities serve two important functions: by disseminating information about successful projects to potential users, the Endowment helps organizations to learn from the experience of others and thereby increases the impact of its efforts and maximizes the uses of Federal funds; and by collecting and distributing information about the state of the humanities, the Endowment may more effectively carry out its legislative mandate to help "develop and encourage the pursuit of a national policy for the humanities."

because or limited funding, dissemination activities in fiscal 1974 are being confined to three areas: Humanities, the Endowment's highly successful newsletter; the Jefferson Lecture, which, through the appointment this past year of Erik Erikson, attracted extensive coverage in the media and stimulated increased public attention to the humanities and their relation to national life; and the "Good Reading in the Humanities" activity, the Endowment-sponsored series of book lists designed for the general reading public, to help put contemporary problems such as urban development and economic issues into a broader perspective. Also in the latter part of the year staff will begin planning for a system for abstracting, alerting potential users to, and providing at cost copies of, NEH grant reports.

In FY 1975 an expansion of these activities is proposed:

1. monthly publication of Humanities;

2. development of a series of Bicentennial-related reading lists to be issued in 1975-76;

3. establishment of the reports dissemination system described above and investigation of its possible extension into a humanities information center to distribute material about the humanities programs of other organizations;

4. creation of a series of NEH Grant Profiles or case studies describing in detail successful innovations in education, especially in two-year colleges, and in public humanities programs which have been supported by the Endowment and which might be replicated by other organizations in other parts of the country;

These various and long-necessary activities will help the Endowment give concrete expression to that section of its authorizing legislation directing it to "foster the interchange of information in the humanities."

Youthgrants ($650,000)

The Youthgrants in the Humanities program was established to encourage serious humanistic activities which are designed, developed and conducted by students and out-of-school youth. The program has evoked an enthusiastic response from the nation's youth, the NEH congressional authorizing committees, and the general public, both because of the remarkable projects which the program has funded and because of the fact that while Federal and private agencies have long supported youth initiated projects in the sciences, similar support was not available to young people desiring to work in the humanities.

In FY 1973, the first full year of the program's operation, 410 applications were evaluated by a special Youthgrants panel consisting primarily of young people and by the National Council; out of these, 50 awards were made, totaling $218,806. Approximately the same number of grants totaling $250,000 is expected to be awarded in FY 1974.

The projects supported thus far cover all fields of the humanities, involving education, research, archival work, film and community activities in every geographic region. They include a student-run course in film studies administered through a community college in Connecticut; research on Cajun music; a local history study undertaken by high school students in Nevada and similar historical research projects by college students or out-of-school youth in Portland, Oregon, Rock Island, Illinois, Fort Collins, Colorado, and the Cumberland Mountains of Tennessee; production of a multimedia presentation on women's history for high schools; and a study of songs from the American Revolution (a project leading to a performance by the grantee as part of the pre-Inaugural concert activities last year.) Many of these are group activities, and all projects have built-in mechanisms for sharing with others the results of the work. Reports on Youthgrants-supported projects clearly indicate that young people through their work are not only furthering their own humanistic education but are demonstrating to both their peers and their community the continuing relevance of the humanities to American society.

In response to the results of the activities supported to date and an expected application level of 600, the Endowment plans in FY 1975 to increase the total number of general Youthgrants awards to about 60, continuing until 1976 a special emphasis on those projects designed to trace the development of national and local institutions -- educational, social, cultural and political -- during the past two hundred years.

In addition to the Youthgrants projects, the Endowment will also support the Bicentennial Youth Debate, presently in its early development. The Debate seeks to promote the involvement of youth in active study of the ideas, principles, and values of the American Revolution. The aim is a program that will attract a broad spectrum of participation and simultaneously encourage them to explore in a serious way the development and dissemination of humanistic knowledge. The forensic format was selected for three reasons. First, debate over basic issues was a critical feature of the nation's beginning years. Second, through their research and subsequent discussion with their peers, students will gain a greater understanding of the era of the Revolution. And finally, the presentation of such activities to a broader audience is expected to foster community-wide discussion on the fundamental questions underlying the birth and growth of the nation. The Debate program will consist of series of local, state, and regional competitions to take place in 1975-76 with televised national competition in July of 1976. Planning and initial organizational work has been started in FY 1974. In FY 1975 organization of the program must be completed and study materials must be prepared to assure that students in every high school and college -- especially those in the rural parts of the country which are not normally involved in the established debate activity -- will have a meaningful opportunity to participate. The FY 1975 request includes $350,000 for this purpose.

IV. MATCHING FUNDS

(Indefinite Appropriation)

	1973 Actual	1974 Estimate	1975 Request	Increase or Decrease(-)
Federal matching	$3,500,000	$6,500,000	$10,000,000	$3,500,000
Gifts and donations	4,395,037	6,500,000	10,000,000	3,500,000
Carryover from previous year[1/]	3,874,197[2/]	2,100,630	--	-2,100,630
Total available	11,769,234	15,100,630	20,000,000	4,899,370

1/ These carryovers resulted primarily from gifts received too late in the fiscal year to be obligated; almost all of these funds, however, were already committed to approved projects.

2/ Includes $3,260 recovered from prior years' obligations.

Through matching funds provided from the indefinite appropriation the Endowment stimulates private gift-giving in support of the humanities and encourages colleges and universities, professional societies, research organizations, and other institutions with

humanities programs, to develop new sources of funds and thus broaden their base of support.

The offer of gifts to the Endowment has steadily increased from $100,000 in fiscal 1967 to nearly $4.4 million in FY 1973. Of the total received last year, $3.5 million was raised directly in response to specific matching offers made by the Endowment. It might be noted that a much greater amount could have been raised last year, but the Endowment was forced to severely restrict new matching offers as full matching of the 1973 authority ($3.5 million) was already assured midway in the year. These developments indicate a rapidly growing awareness of and support for Endowment activities among the general public.

Particularly encouraging this past year was the continued increase in the amount of money received on behalf of humanities research projects, activities which traditionally have attracted very little support. The program distribution of the $3.5 million in matchable gifts received during the 1972-73 period is shown below.

Gifts Received, FY 1972-73, by Program

(amounts in thousands)

	FY 1972		FY 1973	
Program	Amount	(Percent)	Amount	(Percent)
Public	$190	(5)	$108	(3)
Education	1,685	(48)	1,496	(42)
Fellowships	7	(1/)	400	(11)
Research	1,295	(37)	1,419	(42)
Planning 2/	323	(10)	77	(2)
	3,500	(100)	3,500	(100)

1/ Less than .5 percent.

2/ Includes unrestricted gifts.

Noteworthy among the gifts raised last year was the $1.5 million donated on behalf of the New York Public Library, which, prior to the series of NEH challenge grants, had been plagued by increasing deficits and forced to curtail the operations of its incomparable research facilities. Stimulated by a challenge grant of $750,000 from the Endowment last year, citizens, corporations, and organizations throughout the city and the nation matched the Federal offer 2-to-1 before the year was over. To follow up on the attention generated by its FY 1973 offer, the Endowment this year has made a new challenge offer which could produce over $2 million in private funds for the Library.

In addition to major gifts on behalf of the New York Public Library, many other humanities projects have been made possible through the combined resources of private and public giving, such as comprehensive updating and strengthening of humanities curricula in 10 colleges

and universities (Pennsylvania State Medical School; Case-Western Reserve University in Cleveland; Lees Junior College in Jackson, Kentucky; Austin College in Sherman, Texas; Juniata College in Huntingdon, Pennsylvania; Alice Lloyd College in Pippa Passes, Kentucky; Earlham College in Richmond, Indiana; Lehigh University in Bethlehem, Pennsylvania; Western College in Oxford, Ohio; and Ottawa University in Ottawa, Kansas).

Other gift-supported projects include an exhibit on "Man in his Environment" being prepared for travel by the Field Museum of Chicago; research in Jewish studies at the Yivo Institute in New York City; the development of an American Indian History Center at the Newberry Library in Chicago; studies of Basque culture in Idaho, of Finnish folklore at Suomi College, of Alaska Indian oral history at Fairbanks; an Appalachian film workshop; curriculum development undertaken by the United Tribes of North Dakota in Bismarck; an institute in philosophical theology at the University of Connecticut and a conference on Asian philosophy and religion being planned in Albany; liberal education at the graduate level for teachers of secondary schools in the inner cities at St. John's College at Santa Fé, New Mexico; a variety of collections of papers or oral histories of modern political figures, such as Carl Hayden of Arizona, George C. Marshall of Virginia and Earl Warren of California, and historic figures such as Jonathan Trumbull of Connecticut, Frederick Law Olmsted (designer of Central Park in New York and the U.S. Capitol grounds), John Marshall, and George Washington; numerous archaeological expeditions carried out by American universities in this country (southwestern Missouri and southern Maryland) and abroad (Greece, Turkey and Tunisia).

The fiscal 1974 indefinite appropriation is $6.5 million. The fiscal 1975 request is for $10 million. Approximately one-third of these funds will be used in support of film, television, community discussion, and experimental programs for the general public; one-third will be used to stimulate private support for financially threatened research centers and for several score humanities research projects; and the remainder will be used for the Education Division's Institutional programs to help assure that grantee institutions will locate private support which will help them continue their programs when Federal funding terminates.

NATIONAL ENDOWMENT FOR THE HUMANITIES

Gifts Received: Actual 1967-73 and Estimated 1974-75 (in thousands)

	1967-69	1970	1971	1972	1973	Total 1967-73	1974 (est)	1975 (est)
Public	$295	$518	$221	$189	$108	$1,331	$1,750	$2,500
Education	850	956	1,116	1,689	1,496	6,107	1,750	2,500
Fellowship	5	--	--	7	400	412	--	500
Research	274	278	1,045	1,313	2,305	5,215	2,500	3,500
Planning[1/]	269	248	118	302	86	1,023	500	1,000
Total gifts	1,693	2,000	2,500	3,500	4,395[3/]	14,088	6,500	10,000
Matching funds released	1,693	2,000	2,500	3,500	3,500	13,193	6,500	10,000
Total gifts and matching funds received	3,386	4,000	5,000	7,000	7,895	27,281	13,000	20,000
Unobligated balance from prior year	--	1,549	2,153	4,005	3,872		2,101	--
Adjustments[2/]	-81	20	21	3	2		--	--
Total available	3,305	5,569	7,174	11,008	11,769		15,101	20,000

Obligations from Gifts and Matching Funds, FY 1967-75 (in thousands)

Public	506	572	616	626	258	2,578	3,563	5,000
Education	792	1,454	1,468	3,164	3,922	10,800	4,213	5,000
Fellowship	--	10	--	15	400	425	400	1,000
Research	278	735	829	3,311	4,405	9,558	5,883	7,000
Planning	180	645	256	21	684	1,786	1,042	2,000
Total obligated	1,756	3,416	3,169	7,136	9,669	25,146	15,101	20,000
Unobligated balance	1,549	2,153	4,005	3,872	2,100		--	--
Total available	3,305	5,569	7,174	11,008	11,769	-	15,101	20,000

1/ Includes unrestricted gifts.
2/ Includes returns from prior years' grants (+) and transfers to other accounts (-).
3/ Includes $895 thousand in gifts not eligible for matching.
Note: Because of rounding, detail may not add to totals.

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

ADMINISTRATIVE EXPENSES

FY 1974 - $6,500,000 FY 1975 - $11,000,000

Increase - $4,500,000

The genesis of the workload of the Foundation lies in the numbers of applications received. From this beginning, the number and size of grants will be determined. It must be emphasized, however, that regardless of the availability of funds, each application must be processed by the staff, submitted to a panel, and thence to the appropriate National Council. This processing requires people; it also requires a substantial amount of travel in providing technical assistance and attending panel meetings. Further, it generates a need for various administrative services such as space and equipment. Parenthetically, as a result of P.L. 92-213, this budget contains a request for almost $1 million for space rental.

As the number of awards grows, the expanded services of accounting and auditing are required. Moreover, because of the duration and the terms of many grants, the need for these two services remains years after the grant is obligated.

The effect of growing appropriations, as well as the ever-increasing popularity of the Foundation's programs, is clearly recognized. One thing which is not apparent is the seriously understaffed condition of this agency during the past three years. The rapid growth of the Foundation has imposed problems not present in a less dynamic environment. Therefore, the Foundation, as it establishes patterns in an area heretofore unexplored by the Government, cannot be compared with an older agency operating under a level funding situation. Hence, our request for additional personnel is based upon rational estimates of our current requirements, as well as those generated by additional funding.

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

SUMMARY OF FUNDS AVAILABLE

	1973 ACTUAL	1974 ESTIMATE	1975 REQUEST	INCREASE
Appropriation, Definite	$5,314,000	$6,500,000	$11,000,000	$4,500,000
Unobligated Balance Prior Year	97	97	-0-	
Total Available for Obligation	5,314,097	6,500,097	11,000,000	
Obligations	5,287,300	6,500,097	11,000,000	
Unobligated Balance	$ 26,797*	$ -0-	$ -0-	

*Includes $26,700 unobligated balance lapsing.

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

SUMMARY OF OBLIGATIONS BY ORGANIZATIONAL UNIT

	1973 ACTUAL	1974 ESTIMATE	1975 REQUEST	INCREASE 1975 COMPARED WITH 1974
NATIONAL ENDOWMENT FOR THE ARTS	$1,819,045	$2,041,600	$3,800,000	$1,758,400
NATIONAL ENDOWMENT FOR THE HUMANITIES	1,529,066	1,704,000	2,900,000	1,196,000
SHARED STAFF	1,939,190	2,754,400	4,300,000	1,545,600
TOTAL	$5,287,300	$6,500,000	$11,000,000	$4,500,000

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

SUMMARY OF OBLIGATIONS BY OBJECT CLASSIFICATION

		1973 ACTUAL	1974 ESTIMATE	1975 REQUEST	INCREASE 1975 COMPARED WITH 1974
	PERSONNEL COMPENSATION:				
11.1	Permanent Positions	$3,085,644	$3,985,500	$ 6,120,200	$2,134,700
11.3	Positions Other Than Permanent	416,172	434,900	894,700	459,800
11.5	Other Personnel Compensation	40,523	50,800	75,700	24,900
	Total Personnel Compensation	3,542,339	4,471,200	7,090,600	2,619,400
12.1	Personnel Benefits - Civilian	281,312	435,500	662,300	226,800
21.0	Travel and Transportation of Persons	301,251	342,300	588,800	246,500
22.0	Transportation of Things	2,387	2,000	3,000	1,000
23.0	Rent, Communications & Utilities	271,615	685,700	1,216,100	530,400
24.0	Printing and Reproduction	144,980	95,100	319,000	223,900
25.0	Other Services	408,615	290,800	832,900	542,100
26.0	Supplies and Materials	79,336	102,400	127,300	24,900
31.0	Equipment	255,465	75,000	160,000	85,000
42.0	Insurance Claims and Indemnities	-0-	-0-	-0-	-0-
	TOTAL	$5,287,300	$6,500,000	$11,000,000	$4,500,000

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

NATIONAL ENDOWMENT FOR THE ARTS

OBJECT CLASSIFICATION

		1973 ACTUAL	1974 ESTIMATE	1975 REQUEST	INCREASE (DECREASE) 1975 COMPARED WITH 1974
	PERSONNEL COMPENSATION:				
11.1	Permanent Positions	$1,118,046	$1,378,000	$2,213,000	$ 835,000
11.3	Positions Other Than Permanent	161,604	163,700	398,000	234,300
11.5	Other Personnel Compensation	12,361	15,200	23,000	7,800
	Total Personnel Compensation	1,292,011	1,556,900	2,634,000	1,077,100
12.1	Personnel Benefits - Civilians	97,771	146,200	253,000	106,800
21.0	Travel and Transportation of Persons	171,337	178,400	419,000	240,600
22.0	Transportation of Things	36	-0-	-0-	-0-
23.0	Rent, Communications & Utilities	37,878	58,200	89,000	30,800
24.0	Printing and Reproduction	65,960	50,600	101,000	50,400
25.0	Other Services	139,020	34,200	290,000	255,800
26.0	Supplies and Materials	13,160	17,100	14,000	(3,100)
31.0	Equipment	1,872	-0-	-0-	-0-
	TOTAL	$1,819,045	$2,041,600	$3,800,000	$1,758,400

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

NATIONAL ENDOWMENT FOR THE HUMANITIES

OBJECT CLASSIFICATION

		1973 ACTUAL	1974 ESTIMATE	1975 REQUEST	INCREASE (DECREASE) 1975 COMPARED WITH 1974
	PERSONNEL COMPENSATION:				
11.1	Permanent Positions	$1,018,562	$1,317,900	$2,059,200	$ 741,300
11.3	Positions Other Than Permanent	184,485	55,400	208,700	153,300
11.5	Other Personnel Compensation	7,668	8,800	12,700	3,900
	Total Personnel Compensation	1,210,715	1,382,100	2,280,600	898,500
12.1	Personnel Benefits - Civilians	97,844	142,300	207,300	65,000
21.0	Travel and Transportation of Persons	107,156	81,400	49,800	(31,600)
22.0	Transportation of Things	-0-	-0-	-0-	-0-
23.0	Rent, Communications & Utilities	15,334	22,500	36,100	13,600
24.0	Printing and Reproduction	54,965	23,500	197,000	173,500
25.0	Other Services	35,729	43,900	115,900	72,000
26.0	Supplies and Materials	7,323	8,300	13,300	5,000
31.0	Equipment	-0-	-0-	-0-	-0-
	TOTAL	$1,529,066	$1,704,000	$2,900,000	$1,196,000

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

SHARED STAFF

OBJECT CLASSIFICATION

		1973 ACTUAL	1974 ESTIMATE	1975 REQUEST	INCREASE (DECREASE) 1975 COMPARED WITH 1974
	PERSONNEL COMPENSATION:				
11.1	Permanent Positions	$ 949,035	$1,289,600	$1,848,000	$ 558,400
11.3	Positions Other Than Permanent	70,084	215,800	288,000	72,200
11.5	Other Personnel Compensation	20,495	26,800	40,000	13,200
	Total Personnel Compensation	1,039,614	1,532,200	2,176,000	643,800
12.1	Personnel Benefits - Civilians	85,698	147,000	202,000	55,000
21.0	Travel and Transportation of Persons	22,758	82,500	120,000	37,500
22.0	Transportation of Things	2,351	2,000	3,000	1,000
23.0	Rent, Communications & Utilities	218,403	605,000	1,091,000	486,000
24.0	Printing and Reproduction	24,054	21,000	21,000	-0-
25.0	Other Services	233,867	212,700	427,000	214,300
26.0	Supplies and Materials	58,853	77,000	100,000	23,000
31.0	Equipment	253,592	75,000	160,000	85,000
42.0	Insurance Claims and Indemnities	-0-	-0-	-0-	-0-
	TOTAL	$1,939,190	$2,754,400	$4,300,000	$1,545,600

11.1 PERMANENT POSITIONS

FY 1974 - $3,985,500 FY 1975 - $6,120,200

Increase - $2,134,700

The FY 1975 estimate will reflect the personnel costs of a staff of 397.

11.1 PERMANENT POSITIONS
NATIONAL ENDOWMENT FOR THE ARTS

FY 1974 - $1,378,000 FY 1975 - $2,213,000

Increase - $835,000

The Endowment has taken a leadership role in developing areas and has emphasized program technical assistance to artists and cultural groups in its planning during the last four years. The most notable Endowment program of leadership is in Federal Design. When this effort was initiated by President Nixon in May 1972 and supported by the Congress no one could have predicted the scope and depth of its impact to date. The future holds even more promise.

Facilitative/technical assistance has always been an important part of the help provided by the Endowment. However, most of this has been done on a time available basis with some exceptions. For example, the Endowment obtained the loan of an employee from IBM to provide financial and management assistance to Expansion Arts applicants and grantees.

A significant portion of the personnel resources requested is to provide an encouragement/leadership role and facilitative/technical assistance. This is true especially in Performing Arts and Public Media, Special Projects, Architecture + Environmental Arts, including Federal Design Assemblies and Federal Graphics. It is an increasingly important component of all programs.

Office of the Chairman

Staff Assistant, GS-9; Secretary, GS-7. Assistance is needed in staffing out plans for speaking engagements and visitations by the Chairman, preparing press releases and other announcements of programs to insure broad dissemination of the Endowment's goals and availability of programs. A full-time secretary is requested for the Chairman's immediate office to handle anticipated public inquiries to that office.

Office of Federal/State Partnership

Program Coordinator, GS-12; Program Specialist, GS-5; Secretary, GS-5. A Program Coordinator will be responsible for maintaining almost daily contact with the projected eight Regional Coordinators and assisting in performing the necessary detailed staff work to implement the increased funding levels to state arts agencies in such areas as Project Assistance Internships, and the pilot program for State Arts Agency grants to community arts agencies. A Program Specialist will be needed to monitor program, program development and evaluation, and administrative funds in addition to assisting in the processing of increased numbers of applications and monitoring of grants and cash requests.

Division of Education Programs

Assistant Director, GS-14. An Assistant Director will relieve the Director of the day-to-day administrative duties of this office, as well as act on the Director's behalf during his absence allowing the Director to devote his efforts to the necessary long-range planning of the program which includes the highly successful Artists-in-Schools.

Division of Expansion Arts

Accountant/Advisor, GS-11; Program Specialist, GS-9; Secretary, GS-5. An Accountant/Advisor will be responsible for the financial analysis and evaluation of all applications, cash requests, and final reports made to this program by applicants and grantees. This staff member will be concerned primarily with providing the technical assistance needed by this program's applicants and grantees which are professionally directed, community-based arts groups but which are relatively inexperienced in the preparation of applications, accounting techniques, and other financial matters. A Program Specialist will assist in the processing of applications and grants. It is estimated that the Expansion Arts Program will receive over 500 applications during FY 1974 resulting in grant awards in excess of 250. It is anticipated that during FY 1975 this program will receive approximately 900 applications and will award an estimated 400 grants. A full-time secretary will be assigned to the Assistant Director for administrative support.

Division of Special Projects

Assistant Director, GS-14; Program Specialist, GS-11. This office is responsible for planning and executing a multi-disciplinary program as well as handling special assignments which cannot be met by the other programs. Additional staff activities include the Endowment's relationships with agencies and organizations in the field whose concerns coincide with those of the Endowment including liaison with unions and other labor organizations; the energy crisis, and development of specific programs in touring and mobile activities in all disciplines.

Under the Director, an Assistant Director will be responsible for developing, implementing and administering Endowment support for projects that do not come within the purview of established programs or intimately involve more than one discipline. Initial emphasis

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will be on the development of expanded support for Folk Arts, which is very important for the Bicentennial. A Program Specialist will be responsible for assisting in the development of support for Folk Arts as well as responsibility for administering the grants process for applications of a multi-disciplinary nature and the monitoring of the administrative and program funds allocated to this office.

Division of Architecture + Environmental Arts

Special Assistant, GS-13; Research Assistant, GS-11; Secretary, GS-7. This division has been assigned the responsibility of reviewing Environmental Impact Statements monitored by the Council on Environmental Quality. A Special Assistant will be needed to respond to inquiries from other Federal agencies on their statements and to coordinate the review between the Endowment and other responsible government agencies, as well as provide the necessary input on behalf of the Endowment in order to assure professional evaluation. A Research Assistant will provide the statistical and informational background necessary in evaluating these statements and staff out agency requests. A secretary will be needed to provide administrative support for these important responsibilities. In addition, this position will assist in handling this program's increasing volume of correspondence as well as providing other secretarial support.

Historic Preservation

Program Officer, GS-13; Program Specialist, GS-7; Secretary, GS-7. The Endowment's initiatives in support of preservation/conservation of architectural resources has matured to a stage where the Endowment is now viewed as a spokesman and leader in the field. The Endowment has created a meeting ground where the imagination and talents of contemporary designers and planners are applied to the problems of rehabilitating the architectural heritage of our nation's communities for readaptive uses. These efforts include projects involving both public and private structures. A Program Officer, Program Specialist, and Secretary are the minimum staff needed to assure that the Endowment's current posture will result in the type of support and professional assistance so necessary to articulate the point of view which places preservation interests within a broader framework of the man-made environment and community enhancement of goals.

Federal Graphics

Graphics Specialist, GS-13. The Endowment has been fortunate to receive the services of Jerome Perlmutter who has been on detail from the Department of State since Fiscal Year 1973. This reimbursable detail has been extended through Fiscal Year 1976. A Graphics Specialist is needed to assist Mr. Perlmutter in preparing and staffing out evaluations and recommendations for upgrading the graphics of Federal agencies. Evaluations are provided by panelists from outside the government who have enthusiastically supported this effort and donate their time.

Federal Design Assemblies

Program Officer, GS-13. With the support of Congress, the President's May, 1972 statement initiated a program to improve Federal design. To insure that his mandate is carried out, it will be necessary to have a Program Officer who will coordinate the activities related to the Endowment's participation in the Federal Design Assemblies and follow-up, such as production and dissemination of the newsletter, "Federal Design Matters."

Office of Museum Programs

Program Specialist, GS-9. A Program Specialist will administer the large programs for Aid to Special Exhibitions and Conservation which together will total over 150 grant awards in FY 1974 for more than $2.4 million. It is anticipated that applications to these programs will increase by more than 50% in FY 1975. The present two Program Specialists will handle the remaining ten program areas of this office which will total over 700 applications during FY 1974 with grants being made to over 300 individuals and institutions.

Division of Visual Arts Programs

Crafts Coordinator, GS-12; Program Officer, GS-12. A Crafts Coordinator is particularly important in light of the Endowment's increased support for crafts. Because of budget limitations and personnel restrictions, the Endowment has limited its efforts in this field. A full-time individual is needed to plan and supervise administration of the Endowment's efforts and to act as liaison with the field, which is rapidly expanding, especially among our young people. It is expected that the Bicentennial period will generate even more interest in this field.

A Program Officer will provide overall administrative guidance and concentrate on the increased emphasis in "Works of Art in Public Places." These grants are among the most difficult to administer, but when done properly prove to be the most rewarding for the participants. In addition this staff member will serve as liaison with the General Services Administration in the cooperative efforts between the Endowment and GSA in placing art in Federal buildings in addition to being responsible for administering the Photographers' Fellowship Program, Photography Exhibition Aid, Photography Publications, and the pilot program, Photographic Surveys.

Office of Performing Arts and Public Media

Program Administrator, GS-11. This office is responsible for the administration and overall direction of programs in the Performing Arts (Music, Theatre, and Dance) and Public Media (Film, Television, Radio). A Program Administrator will relieve the Director of the day-to-day administrative responsibilities of coordinating the activities and functions of the programs under his jurisdiction, thus allowing him more time to devote to developing and advocating public policy in his programs as directed by the Chairman. The Program Administrator will monitor budget commitments and coordinate the scheduling of panel meetings and preparation of agendas. In addition, this person will assist the Director in special studies involving the direction, execution, and monitoring of Performing Arts and Public Media Programs. The responsibilities of this position were recommended by a policy and operations task force study.

Division of Dance Programs

Tour Coordinator, GS-9. In fiscal 1975, state arts agencies will assume responsibility for developing and managing the Dance Touring Program within broad Endowment guidelines. In order to make the program more responsive to local needs and to strengthen the Federal-State partnership the Endowment has restructured this activity to accomplish this goal. Because a tour of a dance company often covers more than one state, coordination of the activities of dance companies, state arts agencies and local sponsors is essential to the success of this program. A Tour Coordinator will have administrative responsibility for coordinating the logistic aspects of the Dance Touring Program and for processing applications and

administering grants, thus allowing one of the current Program Specialists to administer expanded components of this program such as Fellowships and Production, Resident Professional Dance Companies, Management and Administration, and Dance Films.

Division of Music Programs

Program Specialist, GS-7. This program is responsive to all of the disciplines considered in music. It will have received over 1,500 applications during FY 1974 and will award over 660 grants ranging from assistance to the individual composers to the nation's largest musical institutions. It is also estimated that this program will receive over 4,000 inquires pertaining to its specific programs during FY 1974. A Program Specialist will assist the present one in administering the Orchestra and Opera Programs which entail applications and grants involving large amounts of monies utilizing both Program Funds and Treasury Funds which in themselves are much more complicated to administer than grants made with only Program Funds.

Division of Public Media

Program Specialist, GS-7. This program is one of the newest within the Endowment and the interest and demands expressed by the public has far exceeded the Endowment's expectations. Funding of this program has increased nearly 60% over the previous fiscal year. In addition to grants making, this program also administers the large contract and grant with the American Film Institute totaling $1.75 million. It is anticipated that the growth of this program will at least equal if not exceed FY 1974. A Program Specialist will assist in processing applications which are expected to increase from 305 applications in FY 1974 to over 450 during FY 1975.

Office of Planning and Management

Deputy Director, GS-15; Audit Reviewer, GS-12. This Office is responsible for the divisions of Administration, Budget and Research, Evaluation, Policy Systems and Analysis, Program Information and Secretary to the National Council on the Arts. Follow-up on audits of contractors and grantees is also the responsibility of Planning and Management. The Director serves as principal liaison with the shared staff of the Foundation. A Deputy Director is needed to relieve the Director of the day-to-day administration of these divisions so that he can devote the necessary time to long-range planning of both the Endowment's program and administrative areas. An Audit Reviewer will be responsible for soliciting comments on audit reports, as well as monitoring the implementation of actions taken on audit reports.

Division of Administration

Personnel Liaison Officer, GS-11; Fiscal Analyst, GS-9. This Division is responsible for development of the administrative budget and implementation and supervision of expenditures of both administrative and Program Development and Evaluation funds. This division is also responsible for personnel management, property and space management, travel and transportation management, employee orientation and professional training, including an ongoing work experience/intern

program for persons interested in arts administration as a career, and supervision of Correspondence Section.

Recently the Endowment had to move into space in the McPherson Building resulting not only in a separation from the Shared Staff but also from Architecture + Environmental Arts, including the Federal Design Program, Visual Arts, and staff of the Federal Council on the Arts and the Humanities. In order to assure that the Endowment's programs continue to receive the support necessary to function efficiently, the Division of Administration must be expanded in order to meet its responsibilities.

A Personnel Liaison Officer will be responsible for ascertaining the Endowment's personnel needs, assisting staff in defining the duties and responsibilities of new positions, recommending realignment of duties and responsibilities as the size of organizational units grows, assisting in the recruitment of professional staff and screening applicants for possible employment within the Endowment.

This position will be the liaison with the Personnel Office of the Foundation, providing them with information pertaining to the Endowment's personnel needs, as well as furnishing them with other pertinent information which is required in various reports and personnel requests to the Civil Service Commission. A Fiscal Analyst will prepare revised budget projections, conduct cost analysis of the Endowment's administrative operations, and coordinate all activities of a financial nature involving the Endowment and the Shared Staff's Accounting Division. This will enable the Administrative Officer to devote more efforts to the long-range planning of the Endowment's administrative function.

Division of Budget and Research

Program Budget Analyst, GA-9; Program Budget Analyst, GS-7. A Program Budget Analyst will be assigned responsibilities for approximately one-third of the Endowment's programs. These responsibilities will include obtaining input from Program Directors for budget requests, monitoring budget allocations, and drafting planning documents at the direction of the Director. A second Program Budget Analyst will be required to maintain detailed budget recods, respond to requests for information on specific programs or grants, prepare reports, and respond to inquiries concerning budget matters.

Division of Policy and Systems Analysis

Program Analyst, GS-12. The Director of Policy Systems and Analysis is currently undertaking a comprehensive review of the Arts Endowment grants process. The Endowment is in its ninth year of grant-making. The grants process has been an evolving one. While substantial changes have been made from time to time, it is felt that now is the time to take a comprehensive look at the process with a view toward streamlining our procedures consistent with the need to be responsive to artists and cultural organizations and assure proper accounting of Federal monies.

In addition, the Endowment is actively engaged in determining the most feasible and economical management information retrieval system applicable to its long-range requirements, as well as current needs. To date, staff has conferred with the General Services Administration, the Office of Management and Budget, and the National

Science Foundation in an attempt to determine what is available within the Government which might be adaptable to the Endowment's needs in this area. A Systems Analyst will be responsible for documenting existing systems and determining the actual needs of the Endowment; this will include consideration of the applicability of an outside information retrival system. This employee will work with Endowment staff to assure that such a system is responsive to agency needs, whether an online component of an outside system or a separate system is chosen.

Division of Program Information

Secretary, GS-7. The functions of this office are to disseminate information about program areas funded by the Endowment to all outlets not covered by the daily and weekly press and to coordinate publications, speeches, articles, and media feature materials related to the Endowment's activities. This office also maintains general broad records on activities, developments, surveys and research in the arts which are pertinent to program information responsibilities. Daily phone calls from the public have more than tripled and are now averaging over 110 per day. Correspondence to this office has increased by more than 50% during the past fiscal year with a weekly average of over 100 requests that must be answered in writing. It is anticipated that this rapid increase in requests by the public will continue as the Endowment activities are expanded. A secretary will be needed to give added support to the staff in answering telephones and typing replies to the public's inquiries.

Secretary to the National Council on the Arts

Secretary, GS-7. This division provides administrative and logistical support to the Presidentially-appointed National Council on the Arts, the more than ten advisory panels and other groups called togeether to give the Endowment advice. This division requires a staff with the ability to deal with people who are at the very top of their professions, artistically, to work with people at the community level who range from those in disadvantaged areas to those of great advantage, and to handle the complexities of arranging large meetings held both in Washington, D.C., as well as other areas of the United States. In addition, this division is responsible for furnishing notices of meetings to the Federal Register and obtaining reports of meetings required by the Freedom of Information Act. A full-time Secretary is needed to provide logistical support to the increasing activities of the National Council on the Arts and advisory panels.

11.1 PERMANENT POSITIONS
NATIONAL ENDOWMENT FOR THE HUMANITIES

FY 1974 - $1,317,900 FY 1975 - $2,059,200

Increase - $741,300

Office of The Chairman

Bicentennial Coordinator, GS-13. This position coordinates the Endowment Bicentennial endeavors involving millions of dollars in FY 75, and assists in liaison with other U.S. Government agencies, and state and private institutions to avoid duplication of effort to insure that Endowment grant support is devoted to the most deserving projects that will provide the best results for the dollar invested.

Secretary Stenographer, GS-6. This position, now filled on a part-time basis, is required full-time to provide clerical and administrative support to the Special Assistant to the Chairman for the Bicentennial and the Bicentennial Coordinator. The secretary will type and take dictation in response to hundreds of letter inquiries concerning the agency's Bicentennial programs. Incumbent will route proposals, schedule appointments, travel and meetings for the two professionals and record meetings in shorthand for transcription for agency records.

Secretary Stenographer, GS-6. This position is required to provide administrative and technical assistance to the Special Assistant to the Chairman. The incumbent will receive and log Congressional mail, route it to applicable program directors or program officers and insure submission of information to be used in preparation of replies. Prepares draft letters for the signature of the supervisor; maintains appointment schedules; attends staff meetings and takes notes in shorthand and transcribes notes for record purposes.

Office of Planning

General Note: Nine new positions are required to meet increased OPA responsibilities during FY 1975.

The purpose of the added staff is to undertake serious evaluation efforts, to meet the demand for an efficient grants information system, to develop and institute an effective dissemination system, and to meet increasing workloads of the Youthgrants. Each new position is justified separately below.

Evaluation/Policy Analysis

Program Analyst, GS-11. Pursuant to National Council direction the NEH Evaluation program is being established in FY 1974. An Evaluation Officer (E.O.) position already exists to develop and institute the program. Only limited evaluation activity can be undertaken, however, as the E.O. will have only one full-time support position this year. The new analyst position requested for FY 1975 will permit the following:

(1) Four full-scale program evaluations to be conducted in FY 1975, one per division--with each analyst responsible for two studies;

(2) Two-three special project evaluations ("inspections") requested by the Chairman's Office as a result of public or congressional controversy;

(3) Design and monitoring of two "analytical studies of need" conducted by outside consultants; and

(4) Improved guidance of divisions and grantee evaluation activity. The new position will also free the Program Development unit which is providing some attention to new program ideas and demonstrations.

Research Assistant, GS-5. This position is needed to provide basic data collection and analysis in connection with the four program evaluations to be conducted in FY 1975.

Secretary, GS-6. This position will provide the Evaluation Officer with secretarial support and the unit with basic clerical support.

Program Development

Secretary, GS-6. Of three currently authorized professional positions, only two are filled. No clerical positions are authorized in F Y74. A full-time secretary is needed to provide the Senior Analyst the support needed to complete his analyses. This need is presently being met through part-time help. With the third position to be filled soon, the secretarial/clerical situation will be even more critical.

Clerk-Typist, GS-4. This position will serve the two specialists clerical support in preparation of typed data and statistics resulting from evaluations.

Grant Information

The manual McBee system, which has constituted the Endowment's Grants information system, has always been of limited use and is now clearly obsolete. The combination of an increasing number of grants to be recorded and increasing inquiries from outside the agency make an automated system essential.

In addition, thus far, the grants information system has not been seen as a real management tool aiding the agency head by projecting future costs of projects funded only for one year or by providing quick and continuing analyses of NEH grants. These capabilities will be increasingly necessary as the agency expands. Thus, while automation would permit some time-saving, continued NEH growth and the increasing realization of the need for additional management data both dictate the need for added staff in the grants information unit.

Existing staff will in FY 74 work with an outside time-sharing firm to design a system which will be flexible enough to accommodate new information requirements for the future (that is not possible with the McBee system), to allow rapid retrieval of information, and to produce analyses and reports in support of NEH budget management and evaluation functions. To institute and operate this expanded information system, the following new full-time positions will be needed.

Grants Information Assistant (2), GS-5. Two permanent, full-time assistant positions are now needed to support the grants information system, as is already evidenced by the fact that part-time temporary and overtime help are presently providing more than the equivalent of two man-years of effort.

Clerk-Typist, GS-4. A full-time clerical position will be necessary to support the grants information system and relieve the assistants of routine clerical work. During FY 74, this help has been provided by a temporary employee.

Youthgrants General

In FY 75 Youthgrants projects will increase by 50% as part of the NEH Bicentennial activity. In addition, by FY 75 the Youthgrants program will have ended its two-year experimental course. Although the specific future directions of the program will be set only after a close review of the 1973-74 experience, present indications are that the program has been highly successful in making the public more aware of how young people can enrich themselves and their community through active, creative work in the humanities; at the same time it is obvious that the program has gained a new constiutncy for the Endowment and has suggested a number of possible new program thrusts. Therefore, it is proposed to expand in FY 75 the present limited scope of the Youthgrants program to include a wider range of Youth-oriented activities, especially in connection with the Bicentennial. Also, the Bicentennial Youth Debate (BYD), now in the initial planning stage will be underway in FY 75 and will result in ideas for new kinds of activities involving young people. For the necessary supervision of the BYD, to examine the possibilities for new kinds of appropriat NEH-sponsored youth activities, as well as to oversee the expanded number of regular Youthgrant projects, the present staff needs to be augmented by a clerical position to carry on the increased administrative functions.

Clerk-Typist, GS-4. A permanent clerk-typist is needed to handle the icrease in applications since FY 73 and 50% increase in inquiries (written and telephone).

Public Information Office

Librarian, GS-12/5. A full-time, permanent Librarian is needed to manage the operation of the Endowment's Library of 3,000 volumes and 200 periodicals. The Librarian is responsible for the acquisition of new material for the library, for coordinating with Endowment staff on material required for the library and for superivising the daily operation of the library. The Librarian also assists NEH staff in its research activities and acts as a Liaison with libraries of other governmental and private organizations, such as the Library of Congress and the Smithsonian Institution for the purpose of obtaining loan material not available in the NEH library. For the past several years this position has been filled on a part-time basis.

Publications Specialist, GS-9. A Publications Specialist is needed to write and supervise design and lay out for the Endowment's Annual Report and for the annual Program Information for Applicants brochure. The Publications Specialist will also assist the various divisions and offices in the preparation of brochures, posters and other informational materials prepared annually to inform the public about the Endowment's various programs. In addition, the Specialist will manage the design, layout and production of six "Occasional Papers" commissioned annually by the Endowment to be written by leading scholars on a variety of subjects in the Humanities. The Specialist will also research and write occasional news releases on Endowment activities.

Clerk-Typist, GS-5. A full-time clerk-typist is needed to assist the Publications Specialist and other staff members of the Public Information Office in typing the NEH Annual Report, the Program Information Brochure, Occasional Papers, and news releases. The clerk-typist will be responsible for answering routine correspondence about NEH publications, maintaining files on publications and other activities, and for answering telephone inquiries.

Division of Fellowships and Stipends

College Teachers and Centers Program

Program Assistant, GS-7. This Program Assistant will work under the general supervision of the Program Specialist to screen and process applications in the large College Teachers Fellowships program. This assistant will also do statistical studies of the applications and awards to be used in the evaluation and administration of the program, and will help with studies and research necessary for the new Centers program.

Clerk-Typist, GS-5. This clerk-typist will work with the Program Specialist and assist typing, logging, filing, answering telephones, and performing general secretarial duties.

General Fellowships and Professions Programs

Program Assistant, GS-9. This Program Assistant will work under the supervision of the Program Officer and Specialists for the General (Senior and Younger Humanist) Fellowships and the Professions Fellowships. The position is needed to help respond to the increased numbers of inquiries in these programs, and to assist in evaluation and administration as necessary. The new combined program will have at least twice the number of applications received by the former Senior program alone. This position was filled on a temporary basis in 1974, but is needed on a regular basis to handle the volume of business.

Program Assistant, GS-7. This Program Assistant will work under the general supervision of the Program Specialists to screen and process applications. He will do statistical studies of the applications and awards and assist the General Fellowships Professions programs as needed. The duties will be similar to those performed by the GS-9 Program Assistant, but of a simpler and more routine nature.

Clerk-Typist, GS-5. This position will be needed to assist the Program Specialists and Program Assistants in handling the large volume of correspondence and other clerical work in the new combined and enlarged General Fellowships Program. This will involve correspondence connected not only with the increased number of applications, but also with setting up evaluating panels of consultants.

Administrative Processing

Clerk-Typist, GS-5. This position will be needed to assist with the processing of applications in all programs under the direction of the Staff Assistant. The amount of checking, logging, xeroxing, typing, filing, assembling, and mailing of applications is indicated on the attached chart. In addition, mailing lists of up to

1,200 names must be maintained for the six programs, in addition to routine typing and office work. This was filled on a temporary basis in 1974, but is neded regularly.

Clerk-Typist, GS-4. This Clerk-Typist will perform tasks similar to those of the GS-5 Clerk-Typist described above, and also under the direction of the Staff Assistant. This clerk will perform the regular office work in addition to fellowship processing. This position was filled on a temporary basis in FY 1974 and is needed regularly to handle the high volume of clerical work.

Division of Education Programs

Program Specialist (Planning), GS-11. This person will assist the Program Officer described above in duties pertaining to Planning Grants. He/she will review some 60 pre-proposals, respond to some 400 inquiries, advise 100 applicants, and assist in processing some 120 proposals during the year.

Clerk-Typist (Planning), GS-4. Needed to aid and support the two staff members described above; typing, filing, reception duties. Increase in applications in the Planning category has already been noted in FY 73 and is expected to increase at this rate in coming years: 80 proposals (actual) in FY 73, 100 proposals in FY 74, and 120 proposals in FY 75.

Program Specialist (Cultural Institutions Program), GS-7. This Program Specialist will assist the Program Officer in the Cultural Institutions Program. He will analyze proposals assigned to him by the Program Officer and offer advice to the authors of those proposals on how to proceed in the applications process. He will prepare abstracts of approximately 70 applications per cycle for presentation to the review panel and the Council.

Program Specialist (Program), GS-7. This staff member is needed to assist with the work of processing Program Grant applications, responding to inquiries, interviewing applicants, editing summaries, reviewing pre-proposals. He/she will review some 60 pre-proposals, respond to some 400 inquiries, advise 100 applicants, and assist in processing some 120 proposals during the year. The growth rate in applications in this relatively new category is estimated as follows: 40 final applications (actual) FY 73; 100 final applications (est.) FY 74, 120 final applications (est.) FY 75.

Program Specialist (Elementary and Secondary Education), GS-12. This Program Specialist, whose academic background is in the philosophy of elementary and secondary education, will assist the Program Officer in the Projects Program. He will analyze proposals assigned to him by the Program Officer and offer advice to the authors of those proposals on how to proceed in the application process. He will prepare abstracts of applications for review panels and the Council. He will help to develop and coordinate the Division's programs in elementary education and secondary education and he will supervise the National Humanities Faculty and other elementary and secondary education programs in the division, outside of Projects. At present, there is no person on the division's full-time staff who possesses the special qualifications necessary for this position.

Division of Public Programs

Film/TV

Clerk-Typist, GS-4. This person will supplement the existing secretary in Film/TV, assisting in secretarial duties for 4 professional staff in the Film/TV Program in processing and routing approximately 2,000 incoming telephone calls, 2,500 written inquiries, 250 proposal applications, and some 350 visitors during the fiscal year. Together they will type 5,000 2-page letters; transcribe 1,500 dictaphone tapes; type 3,500 memos and reports; reproduce 250 proposals averaging 35 pages each and abstracts for the National Council averaging 7 pages each; maintain a mailing list of 1,500 names, and process 48 travel authorizations and vouchers for the professional staff and approximately 65 for panelists for the Film/TV program.

Program Development Centers

Clerk-Typist, GS-4. This person will provide clerical assistance for the Program Development Centers by handling 2,000 incoming telephone calls; type their 1,500 letters; transcribe 750 dictaphone tapes; type 1,200 memos and reports; reproduce their 150 proposal applications and abstracts for the National Council; maintain their mailing lists of 1,500 names; receive 150 visitors who come to NEH offices for discussions about programs, and process 26 travel authorizations and vouchers for professional staff of this program, as well as 35 for panelists.

State-Based Program

Clerk-Steno, GS-5. This position will supplement the three secretarial/clerical personnel assisting the six full-time and one part-time professional staff in the State-Based Program. This person will work with other secretarial/clerical personnel in helping the professional staff to maintain liaison and coordination with 55 state committees, averaging 20 members per committee, and the committee's staff directors. Such liaison and coordination includes the handling of approximately 8,000 incoming telephone calls; typing 10,000 2-page letters; processing 9,000 pieces of incoming material; transcribing 6,000 dictaphone tapes; typing 8,000 memos and reports; reproducing 55 state proposals of 40 pages each and 900 pages of abstracts for these proposals for the National Council; distributing 60,000 newsletters to the state committees; maintaining a 2,000-name state committee mailing list and 55 state committee files; processing 193 travel authorizations and vouchers for staff travel and another 55 for state committee staff directors' travel; greeting approximately 400-500 visitors to the NEH, and assisting in logistical matters for five regional meetings and one national meeting of 800 people.

Clerk-Steno, GS-4. This person will work under the senior secretary assisting the six full-time and one part-time professional staff in the State-Based Program. She will be directly responsible for handling the approximately 8,000 incoming telephone calls; typing of 10,000 letters, as well as other such documents as 8,000 memos and reports; opening and distributing 9,000 pieces of incoming correspondence (letters, memos, minutes of meetings, press releases, reports, grant proposals, activity reports); reproducing 55 state

proposals and abstracts for the National Council; assisting in the processing of 193 travel authorizations and vouchers for staff travel; receiving the approximately 400-500 visitors to the office, and maintaining 55 state committee files.

Clerk-Steno, GS-4. This clerical person will supplement the existing clerical person for the Museums Program, and the three professional staff in establishing, maintaining, and reviewing relationships with the Museum Program's primary constituents. This person will be responsible, along with the Clerk-Steno (5/1), for handling approximately 4,500 telephone calls; typing 5,500 2-page letters; processing 4,500 pieces of correspondence (letters, memos, reports, press releases, grant proposals); transcribing 2,500 dictaphone tapes; typing 5,500 memos and reports; reproducing 500 proposals of 30 pages each and 500 abstracts of 5 pages each for the National Council; maintaining a mailing list of 7,500 names and 175 project files; meeting with approximately 700 visitors to NEH offices, and processing 60 travel authorizations and vouchers for staff travel and another 75 for panelists.

Division of Research Grants Programs

Applications Officer/Program Officer, GS-13. In line with the separation of the division's work into two major branches -- Applications and Grants -- the Applications branch needs to be directed by a Program Officer in order to support the division of responsibility outlined by the division's structure. As the division's work moves in the direction of larger and more complex projects, the Applications Officer shares with the Director and Deputy Director primary responsibility for review and development of preliminary inquiries of special promise. In this regard, the Applications Officer will also make site visits or arrange for extramural consultation as such becomes necessary. Given the close involvement with a number of projects later funded by the division, the Applications Officer is responsible for coordinating his or her understanding of the project with the Grants Officer responsible for administration of the division's grants. In addition, the Applications Officer will assist the Director and Deputy Director with the preparation of annual budget estimates for the division and such material requested throughout the year from the Chairman's office. The Applications Officer will generally oversee all of the administrative responsibilities connected to the receipt of new applications to the Research Grants Division. Thus, the Program Officer is responsible for all correspondence directed to the Division in connection with expected and current applications, referring special problems to the Director and Deputy Director as necessary and supervising the duties of the GS-11 and GS-9 Program Specialists and the remainder of the Applications support staff. The Program Officer is responsible overall for the evaluation of projects and for the preparation of materials for the panel and Council Committee meetings, including alerting the Director to problems or proposals of special import.

Clerk-Stenographer, GS-5. The clerk-stenographer, will serve the stenographic needs of the Deputy Director of the division. There is at present no one specifically assigned to this task. This person will handle all correspondence (average of 30 letters per week), other typing, filing, copying, and other stenographic duties relative to the Deputy Director's work.

Clerk-Stenographer, GS-5. The clerk-stenographer serves the stenographic needs of the Program Officer in charge of the Grants Administration Branch of the division. This person handles 30-50 letters per week, as well as performs all other stenographic duties related to the Program Officer's needs. This position has been filled on a part-time basis during FY 74. The increase in grants administration requires a full-time position.

Clerk-Typist, GS-4. This clerk-typist assists in meeting the stenographic needs of the division's Applications Branch. This person assists in typing routine responses to inquiries (approximately 75 per week) and numerous lists and cards necessary for establishing control over some 1,300 applications. This position has been filled on a part-time basis during FY 74.

11.1 PERMANENT POSITIONS -- SHARED STAFF

FY 1974 - $1,289,600 FY 1975 - $1,848,000

Increase - $558,400

The increase in program funds will generate greatly expanded activities in the Shared Staff. Accounting, travel, printing, personnel administration, grants administration, audit, and physical facilities will be affected proportionately. Therefore, the following positions are requested:

Office of the Director of Administration

Management Analyst, GS-11. The internal audit staff is presently comprised of one person. The need for assistance in this area is dictated by good management practice.

Equal Employment Counselor, GS-12. The agency's Equal Employment Plan cannot be approved by the Civil Service Commission until such a position is established and filled. Moreover, the growth of the agency generates the need for such a person who will conduct his activities outside the sphere of the Personnel Office.

Office of Finance

Budget Analyst, GS-11. This position is needed so the office can efficiently draw together the kinds of information analyses and position papers which are increasingly important in advising the Director of Administration and the Chairmen on how actual events relate to projected budget or prior experience. Requested staff will also assist the Budget Officer in developing historical data for management's use in budgeting and planning for future years.

Supervisory Auditor (2), GS-14; Auditor (2), GS-13; Administrative Assistant GS-8. The FY 1975 audit coverage objective of this office is ten percent of active grants/contracts subject to audit. Progression toward that objective, aside from increased man-hours, is being achieved by devoting increased audit effort to surveys of grantee accounting systems and procedures. The auditors performing surveys will generally work alone, subject to overall supervision and review; therefore, they should have a broad background in a variety of audits such as that afforded in public accounting. Thus, the need for additional GS-14 and 13 positions. While the ten percent coverage may seen negligible, audits will generally be confined to larger

grantees/contractors and will cover three years. Therefore, we will audit the same grantees/contractors infrequently. Surveys, the bulk of our coverage, will be directed toward newer grantees/contractors with the objective of reviewing their accounting and reporting capabilities early in their relationship with the Foundation.

Payroll Clerk (2), GS-5. The Payroll Section maintains two payroll systems: a biweekly payroll for regular employees and on alternating weeks, a biweekly payroll for intermittent employees. Payroll processing time for one regular employee for a year requires approximately ten man-hours. The anticipated increase of 297 regular employees in FY 75 is expected to require 1.5 man-years of additional staffing. An increase of 50 payments to intermittent employees per pay period will require an additional 1.5 man-years of staff. Additional staffing is required to accommodate expanding supervisory responsibility and for increases in report preparation time responsibility and for increases in report preparation time due to the Agency's rapid growth.

Operating Accountant, GS-9. This position is required to support one full-time and one part-time accountant in the Grant Accounting and Control Section. This section maintains details on the expenditure status of all open grants. During FY 72, .75 man-years was expended to maintain records for an average of 2,000 open grants. At the end of Fiscal Year 1973, records are being maintained on 7,927 open grants and it is estimated that 18,500 grants will be open at the end of Fiscal Year 1975. The Agency's desire for tighter control over program fund obligations through a grant prevalidation procedure will require an additional one man-year of effort from this unit.

Operating Accountant, GS-12; Operating Accountant GS-9. These positions are necessary in order to comply with the requirements of the Budget and Accounting Procedures Act of 1950, which requires each agency to maintain an accounting system which effectively controls and accounts for its funds, property and other assets and which provides reliable accounting results to serve as a basis for agency budget requests.

A substantial increase in program funds over the past year has created a tripling in documents to be verified, obligated, accrued, paid and filed by this section. It is apparent that each increase in the Foundation's appropriation has a multiplier effect on this section's workload. These positions are considered essential to properly account for and control an estimated 13,000 additional source documents that will be generated as a result of a 35% increase in the Agency's appropriation.

During FY 73, shortages in staffing prohibited critical reconciliations which should have been performed during the year, resulting in heavy year-end workloads. One man-year is requested to perform these reconciliations.

Voucher Examiners (2), GS-7. The Voucher Examination Section is responsible for ensuring the propriety of all Agency disbursements. This section's manpower requirements are naturally correlated with the Agency's spending level. The above positions are requested to accommodate an increase of 15,000 payments to be processed in FY '75. The average processing time per payment is 15 minutes.

Personnel Office

These justifications are predicated on an anticipated 107 new full-time permanent positions (Humanities - 36; Arts - 35; Shared Staff - 36) plus an additional 14% temporary positions.

Personnel Management Specialist (1) GS-13 and (1) GS-12. Two additional Personnel Management Specialists are needed to accomplish the recruiting and staffing required in a timely and responsive manner. It is anticipated that of the 107 new full-time permanent positions to be established approximately 50 will be professional. Recruiting to fill each of these vacancies requires from 8 to 10 hours' effort by the Personnel Specialist. This totals 550 hours which must be added to the 750 hours (10 hours X 75 positions) required to fill vacancies resulting from turnover. This total, 1300 hours, amounts to approximately 2-3/4 man-years. Therefore, two more Personnel specialists are needed since neither can devote full-time to recruiting because they are also responsible for position classification, career counseling of employees, in-service actions (promotions, reassignments, conversions, etc.) correspondence, and special programs such as Upward Mobility, and Public Service Careers Programs. To date this agency has not participated in most of these programs which are required of all agencies.

Program Development and Training Officer, GS-12; Employee Relations and Training Specialist, GS-9. These positions are needed to assist the Personnel Officer in the development of new personnel programs and to review and update existing ones. These are such programs as Merit Promotion, Performance Evaluation, Incentive Awards, Executive Development, etc.

These positions will also be responsible for both the Training Program and the Employee Relations Program. To date we have not had the resources to properly assess training needs nor to in any significant way counsel employees concerning the best courses available. Also neglected has been meaningful follow-up with employees after completion of training. These critiques are essential for future planning and counseling. An important responsibility of this postion will be the development, implementation, and follow-thru of an Agency Executive Development Program as required by the Civil Service Commission under OMB directives. Although the Foundation is small and has few supergrade positions, we nevertheless are required to maintain an Executive Development Program. Another area of graet importance, and one which has received little attention is supervisory training. The Civil Service Commission requires that all supervisors receive 80 hours of formal training. This Branch will also be responsible for organizing and administering and Agency orientation rpogram designed to meet the needs of both Endowments and the Shared Staff.

Supervisory Personnel Assistant, GS-9. A separate Administrative Branch must be established in order to centralize reports and records functions under one supervisor rather than having them spread among other positions which were heretofore necessary due to the size of the staff and which seemed to work well when the Agency was small. For example, the Personnel Officer's secretary has been responsible for virtually all reports. However, she is no longer able to meet these deadlines because of the other demands on her time as the Personnel Officer's secretary and because of the great increase in the number of reports. When the Agency employment ceiling was under 250 we were exempt from many of the reports required of larger agencies. Due to our ceiling of 290 in FY 74 we no longer enjoy this exemption and are now required to make an additional 54 reports annually. These

reports require 1,072 man-hours of preparation. The records functions are currently performed by the two Personnel Assistants with the help of a GS-5 Clerk-Typist. The growth of the Agency has greatly increased the number of records and Official Personnel Files (OPF) to be maintained. The functions should also be placed under the responsibility of one position since these records are extremely important. OPF's must be very carefully guarded and maintained since there are no duplicate records; the accuracy of the materials contained therein is critical. Further, economies can be realized by having lower grade clerks perform these functions under a supervisor (GS-9) rather than by two Personnel Assistants of higher grades. Additional two clerks are necessary (total of 4) to perform these functions.

Clerical Recruiter, GS-9. A Clerical Recruiter is needed to staff the 150 new clerical positions plus vacancies resulting from turnover and the part-time and temporary employees. A recruiter for typists, stenos, and secretaries will be needed to actively recruit and test in high schools and elsewhere. As the Agency grows we are experiencing a significant increase in the mobility of employees within the Agency resulting from greater opportunity for reassignments and promotions.

Office of Grants, NEA

Grants Specialists (2), GS-7 and (2), GS-5. The National Endowment for the Arts will require 45,000 man-hours to process all applications received, grants awarded and payments made in Fiscal Year 1975. This will average out to approximately 1,900 man-hours for each employee of the NEA Grants Office. Approximately 19,000 of these man-hours will be expended on the some 13,000 applications to be processed. The increase of about 30 percent over Fiscal Year 1974 estimated numbers of applications results primarily from greater dissemination of information on the availability of grant funds for Arts Projects.

Grants to be written in Fiscal Year 1975 are estimated at 5,000 representing an increase of about 49 percent over the estimated number for Fiscal Year 1974. We expect to devote about 9,200 man-hours on processing Fiscal Year 1975 grants. The average time expended on processing each Fiscal 1975 grant will increase slightly because of the increased emphasis on the practice started in Fiscal 1973 of combining as many projects as possible under a single grant. The slight increase in processing time is more than offset by other advantages of this approach.

Office of Grants, NEH

Grants Specialist (3), GS-9. Awards anticipated for FY 75 represent a 48% increase over the FY 74 budgeted number and an attending increase of over 9,000 additional man-hours in the specific grants administration functions of application, award, payments, and final report processing. The award function alone, computed at an average of six hours each, will require a total of 12,744 man-hours. The average grant amount awarded has increased to $64,800 but with the interjection of seven new or changed programs in FY 75, in addition to the eight in FY 74, the value per grant should drop to approximately $50,000. Applications are expected to increase to over 10,000, representing a 48% increase over FY 74, and available funds are increasing by 58%. The new or changed programs represent an increase of 44% over the experienced FY 73 programs and greatly increases the complexi-

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ties personnel will encounter and the demands on their experience and professional knowledge. Due to these elements, an addition of three GS-9 grant specialists, evidencing the required expertise is considered well substantiated and somewhat conservative.

Administrative Assistant, GS-8. The administrative details evolving from the growth of the Division and the concommitant workload is represented by a minimum of a 68% increase in correspondence, a minimum of a 32% increase in personnel actions (92% increase over FY '73), and includes research and advice on outside training for personnel, internal training, general liaison requirements with the other Foundation elements, as well as grantee organization representatives. To provide the necessary assistance, with the desired functional expertise, finesse, and general level of ability, an Administrative Assistant is essential. An overall increase of 39% in the administrative workload is a load that supervisory and management personnel cannot absorb. Incidental to this is the orientation and training in grants administration of the NEH projected personnel increase from 97 to 184, an increase of 89.7%. Approximately 75% of all Endowment personnel are in some manner concerned with administration of grants and must be made familiar with regulations, policies, and procedures. A projected requirement of 1,500 man-hours, from the administrative level, is made for this orientation requirement in FY 75.

Administrative Services Office

Assistant Procurement Clerk, GS-4. Efficient logistic support for any agency requires the timely and finely coordinated purchasing of equipment, supplies and services in order to enable other staff members to carry out their responsibilities. In addition to the mechanical preparation of purchase orders, there needs to be a proper sense of timing in order to have the material or service in place or completed when it is needed. Desks, chairs, tables, filing cabinets, typewriters, adding machines, and all of the many and varied items necessary to the functioning of the agency have to be available in direct proportion to the size of the operating staff. Research, the initial step in determining what and where to procure material, must be done in depth prior to a decision to issue the purchase order. This entails reviewing catalogs to find the item, insuring that all applicable Federal rules concerning the purchase via GSA schedule are in order, determining that delivery dates and all costs are included in the order, and then preparing the actual order. Once the item is received, it must be inspected for damage, for completeness, and to insure that it complies with the ordering instructions. Finally, after being taken up in the agency inventory the invoice must be processed before payment can be made. All of the above, with the exception of the payment function are accomplished by the Procurement Division.

Purchase orders issued by this agency have been steadily increasing as the organization grows in both financial strength and in personnel. In FY 72, 710 purchase orders were issued and in FY 73, 1,000. This number will probably increase to 1,500 in FY 74 and to 2,000 in FY 75.

Office Machine Operator, GS-3. The installation of an internal duplicating facility, as opposed to contracting all such work to outside companies, has been accomplished. The Printing Clerk and Office Machine Operator presently assigned are under training in the new equipment and are gradually assuming full responsibility for the duplicating requirements of the Agency. An annual output of four million

sides of duplicated work will be normal with the present Foundation staff. With the increase in numbers and the added program requirements anticipated next fiscal year for the agency this amount of production will naturally increase. Additonally, there will be an increase in more sophisticated types of Printing and Binding that have to go to the Government Printing Office. While this does not entail actual production in-house, it does require liaison, administrative work, obligation of funds, and the physical aspects of storing, distribution, inspection and control of printed matter and publications. The two people presently authorized to perform these functions will not be sufficient to process this volume of work while at the same time doing production and maintenance of our own equipment. The addition of an Office Machine Operator to assist in this office is necessary in order to accomplish the work required of this section.

Mail Clerk, GS-4. Incoming and outgoing mail, both regular and Registered/Certified, has continued to grow at a phenomenal rate as this agency has expanded in program scope and personnel. Present sampling shows that over 40,000 pieces of outgoing mail are being processed every month and growing continually. Incoming figures vary from 5,000 to 8,000 pieces of incoming mail per week. To this must be added the increase in simple internal communications via memos, routed correspondence, and others, together with the need to service two locations and it is apparent that this simply cannot be accomplished by two people, as is presently authorized. A recent internal study of a professional auditor reviewed the entire mail system at this agency and thereafter presented a formal report to the Chairman recommending, among other things, that the personnel authorizations to this section be increased in order to maintain basic efficiency in the distribution and collection of U.S. and internal mail. An increase in funds with a proportionate increase in mail volume will necessitate an increase in personnel to accomplish this vital function. Of all of the factors related to the efficient management of any organization, the need for transmittal of written communications is probably the most vital. Any failure in this area causes an almost automatic stoppage in work.

Management Technician, GS-5. The Foundation has been charged as have all other Federal agencies, with the responsibility for having a complete and effective Records Disposal Program, Reports Control System and a Forms Control Unit. Up to the present time, these responsibilities have been fragmented between the Administrative Office and the Administrative Services Office. The Agency has now grown too large and is developing too many records, forms, and reports to continue without a centralized system, and a person who can devote full time to this task. All forms will be ordered and controlled via this one central point and person. New forms will be prepared and processed, and then distributed via the Management Technician. Standard forms will likewise be controlled by this individual, who will order, stock and distribute them. The Agency's records have been slowly removed from the active files and placed in storage, but now the time has come when they must be catalogued, stripped, and forwarded to the Federal Records Center for permanent storage. Reports Control will be another vital function performed by the Management Technician. The Foundation prepares a number of intra-governmental reports, as well as internal ones that are important to the efficient operation of the Agency. Reports controls and reports management functions will insure that all of the above are timely, accurate, and that the appropriate records are kept in order to provide

case files for future reference. The employment of a management technician within the Procedures Branch will attain all of the above ends.

Travel Clerks (2), GS-5. The Foundation now has a centralized Travel Branch which performs complete travel services, from reservation to ticket issuance to preparation of the Travel Authorization and preparation of the vouchers. Travel Authorizations average 200 per month at the present time, vouchers average 425 per month, and ticket issuance runs about 150 per month. Precise assembly-line production figures are extremely difficult to provide because of the variances in each case. For instance, a travel authorization form ordinarily takes about twenty minutes to prepare properly. However, frequently there are a large number of individuals included in a single TA, each requiring individual attention and service. Additionally, there are prepayments and advances in many cases. All of this takes an enormous amount of time only by the utmost diligence and a liberal dose of overtime has the present staff been able to keep current. Fiscal Year 1975 will see a proportionate increase in the amount of travel performed by staff members, consultants and panel members. An increase of two additional travel clerks should be sufficient to accommodate the anticipated growth of the agency in the coming year.

Office of General Counsel

Attorney-Advisor, GS-11. The additional Attorney-Advisor GS-11 for the National Endowment for the Arts is made necessary because of the increase in legal business resulting from the Foundation's growth, especially the growth of the legal business of the National Endowment for the Arts. Specifically, the Arts Endowment negotiated and entered into 22 contracts in Fiscal Year 1973 whereas there were only 6 contracts in 1971. Contracts involve considerable expenditures of time in terms of research, drafting of contract provisions, meetings with staff, and negotiations between the Foundation and the contracting parties. Duties involving contract administration also require considerable time and effort.

In addition, correspondence from the public and grantees requiring legal information and/or advice is on the increase.

Further, an additional attorney could attend, in the place of the Counsel, some of the considerable number of weekly meetings at which the presence of someone with legal background is required. This would give the parties the benefit of having an attorney present and would enable the General Counsel to get the legal information he needs in order to make ultimate decisions, while freeing valuable time which could be better utilized by the General Counsel in other endeavors. Also, on occasion there are different meetings scheduled simultaneously which require the attendance of an attorney. These problems will undoubtedly multiply as the Foundation grows.

11.3 POSITIONS OTHER THAN PERMANENT

FY 1974 - $434,900 FY 1975 - $894,700

Increase - $459,800

Both the National Council on the Arts and the National Council on the Humanities are required to provide a recommendation on every application above $17,500 before any action may be taken on it. Because the number of applications is projected at 23,600 for FY '75, the Councils and the Endowments must increasingly rely on the advice of the panelists on these applications, so that each Council may concentrate on the formulation of policy and overall review of Endowment activities. Panelists provide independent judgment from the field and knowledgeable layment. The wisdom of the Council and panels has been acknowledged by Congress, our various constituent art disciplines and the general public. Panels are being constantly examined to insure that the number of meetings be held to a minimum without imparing Endowment programs.

11.3 POSITIONS OTHER THAN PERMANENT
NATIONAL ENDOWMENT FOR THE ARTS

FY 1974 - $163,700 FY 1975 - $398,000

Increase - $234,300

The National Council on the Arts is required not only to recommend on policy but on every application except on Chairman's action. To assist in its responsibilities for professional review of applications, the Endowment has established advisory panels on the recommendation of the Council. In addition, consultants are needed for special assignments and application reviews.

a. Council Meeting..... $ 46,000

Four three-day and one 1-day meetings with 26 members in attendance, $135 per day each.

b. Panelists..... $ 79,000

877 days averaging $90 per day.

c. Consultants and Experts..... $ 52,000

520 days averaging $100 per day.

d. Part-Time and Temporary..... $221,000

As in Fiscal 1974, the Endowment intends to use substantial part-time and temporary personnel resources to maximize the effectiveness of those responsible for program development and planning and to meet secretarial and clerical needs that are essential if the Endowment is to continue to be responsive to artists and cultural groups and responsibly administer Federal monies. This is especially important in planning and executing Bicentennial programming. The Endowment will also be able to meet seasonable manpower needs.

11.3 POSITIONS OTHER THAN PERMANENT
NATIONAL ENDOWMENT FOR THE HUMANITIES

FY 1974 - $55,400 FY 1975 - $208,700

Increase - $153,300

To provide compensation for the National Council on the Humanities and to permit the Endowment to draw upon the resources of the most highly qualified advisory panelists and consultants within the several fields of the Humanities, the Endowment requests the following:

a. Council Meetings..... $ 54,600

Provision is made for four three-day meetings of the National Council on the Humanities, and two three-day committee meetings.

b. Part-Time and Temporary..... $154,100

This amount represents projected part-time and temporary employment costs, as the most economical method of meeting seasonably varying manpower needs.

11.3 POSITIONS OTHER THAN PERMANENT
SHARED STAFF

FY 1974 - $215,800 FY 1975 - $288,000

Decrease - $72,200

This amount represents projected part-time and temporary employment costs.

11.5 OTHER PERSONNEL COMPENSATION

FY 1974 - $50,800 FY 1975 - $75,700

Increase - $24,900

National Endowment for the Arts..... $ 23,000

National Endowment for the Humanities..... $ 12,700

Shared Staff..... $ 40,000

Overtime estimates are based on experience to date and reflect seasonal variations in Foundation workload.

12.1 PERSONNEL BENEFITS - CIVILIANS

FY 1974 - $435,500 FY 1975 - $662,300

Increase - $226,800

National Endowment for the Arts..... $253,000

National Endowment for the Humanities..... $207,300

Shared Staff..... $202,000

This amount will finance personnel benefits, including contributions to the Civil Service Retirement Fund, Social Security, Health Services, and Federal Employees' Group Life Insurance.

21.0 TRAVEL AND TRANSPORTATION OF PERSONS

FY 1974 - $342,300 FY 1975 - $588,800

Increase - $246,500

To carry out the purposes of the Act, both Endowments are authorized to utilize panels of experts and special consultants. These are essential to the projects and programs of the Endowments. They make recommendations concerning grants to be made; they help initiate new ideas, and they serve to broaden the base of private participation in the Endowment's activities.

21.0 TRAVEL AND TRANSPORTATION OF PERSONS NATIONAL ENDOWMENT FOR THE ARTS

FY 1974 - $178,400 FY 1975 - $419,000

Increase - $240,600

It is essential that adequate travel funds be available to the Endowment staff in order to evaluate projects already funded, to provide badly needed technical assistance to arts institutions (particularly developing ones); to assist state agencies in strengthening their funding and programming, to develop bicentennial programming, to encourage private and other sources of monies. Part of the funds requested will necessarily go to increased travel costs. Another portion is for staff travel in modest amounts for personnel between GS-7 and GS-11 who share responsibility for program administration. These trips are an integral part of the Endowment's active effort to provide upward mobility opportunities for junior staff by giving them evaluation experience and education in attendance at important conferences. The funds for Council, panelists, and consultants are based on past experience.

Staff..... $111,000

Council..... $ 37,000

Panelists..... $208,000

Consultants and Experts..... $ 63,000

21.0 TRAVEL AND TRANSPORTATION OF PERSONS
NATIONAL ENDOWMENT FOR THE HUMANITIES

FY 1974 - $81,400 FY 1975 - $49,800

Decrease - $31,600

The requested amount is necessary for FY 1975 staff travel costs to carry out program responsibilities in supervising various Endowment programs and in maintaining liaison with the academic and cultural community. Staff travel for these purposes includes meeting with various panels, site visits with grantees and with institutions, both for purposes of evaluation for higher education-supported programs, and for evaluation of institutional capabilities in relation to other Endowment programs. Staff travel is also required for attendance at symposiums and conferences in all the fields of the Humanities, as well as in the areas of elementary and secondary education, higher education, museums, historical societies and communication media.

Staff..... $ 16,600

Council..... $ 33,200

21.0 TRAVEL AND TRANSPORTATION OF PERSONS
SHARED STAFF

FY 1974 - $82,500 FY 1975 - $120,000

Increase - $37,500

The increase reflects the necessary travel costs for the Audit staff, Grants Office Personnel, and General Counsel personnel, as well as local travel cost for the entire Foundation staff.

22.0 TRANSPORTATION OF THINGS

FY 1974 - $2,000 FY 1975 - $3,000

Increase - $1,000

This sum is required to cover charges for the transportation of things. It includes postage used in parcel post and reimbursement of Government personnel for the authorized movement of household effects.

23.0 RENT, COMMUNICATIONS AND UTILITIES

FY 1974 - $685,700 FY 1975 - $1,216,100

Increase - $530,400

23.0 RENT, COMMUNICATIONS AND UTILITIES
NATIONAL ENDOWMENT FOR THE ARTS

FY 1974 - $58,200 FY 1975 - $89,000

Increase - $30,800

This budget item will provide for FTS service, for commercial long distance telephone service and telegraph service, and for rental of auto for Chairman.

23.0 RENT, COMMUNICATIONS AND UTILITIES
NATIONAL ENDOWMENT FOR THE HUMANITIES

FY 1974 - $22,500 FY 1975 - $36,100

Increase - $13,600

This budget item will provide for FTS service, for commercial long distance telephone service and telegraph service, and for rental of auto for Chairman.

23.0 RENT, COMMUNICATIONS AND UTILITIES
SHARED STAFF

FY 1974 - $605,000 FY 1975 - $1,091,000

Increase - $486,000

This budget provides for $667,000 for space rental, $168,000 for rental of copying equipment, $68,000 for other rental, $98,000 for local telephone service (including installation and service charges) and commercial long distance telephone service and telegraph service, and $90,000 for postage.

24.0 PRINTING AND REPRODUCTION

FY 1974 - $95,100 FY 1975 - $319,000

Increase - $223,900

24.0 PRINTING AND REPRODUCTION
NATIONAL ENDOWMENT FOR THE ARTS

FY 1974 - $50,600 FY 1975 - $101,000

Increase - $50,400

The Arts Endowment has experienced a tremendous growth in the volume of requests for copies of the annual reports, the two-year reports, guidelines, general information, and specific program details. Adequate supplies of these materials and others giving current program information must be maintained ready for mailing. The Endowment initiated with the Museum Survey a research program, the results of which require broad distribution.

The estimate for printing and reproduction will be used to cover the following costs:

a. Program announcements, printed guidelines for each program, program reports and instructions, and other program information tools.

b. The Endowment's Annual Report, as required by the Act.

c. The results of Endowment research and surveys.

24.0 PRINTING AND REPRODUCTION
NATIONAL ENDOWMENT FOR THE HUMANITIES

FY 1974 - $23,500 FY 1975 - $197,000

Increase - $173,500

Printing costs will show a substantial increase in 1975 because of:

a. A steadily increasing knowledge of the Endowment and its programs by the public and by institutions eligible for Endowment support, with a concurrent increase in informational materials required.

b. The expansion of presently existing programs and the establishment of new programs, both requiring increased numbers of program announcements, application forms, instructions and guidelines.

24.0 PRINTING AND REPRODUCTION - SHARED STAFF

FY 1974 - $21,000 FY 1975 - $21,000

This estimate will cover the cost of printing letterheads and envelopes for the Foundation, as well as the cost of the various Office of Management and Budget and Congressional submissions and grant administrative forms.

25.0 OTHER SERVICES

FY 1974 - $290,800 FY 1975 - $832,900

Increase - $542,100

National Endowment for the Arts..... $290,000

National Endowment for the Humanities..... $115,900

Shared Staff..... $427,000

The estimate for other contractual services includes the costs for employee training, $90,700; building alterations, $300,000; machine maintenance, $12,000; cost of audit services to be provided by other agencies, $40,000; photo and art services, $43,600; addressograph, $44,600; clipping services, $6,400; robotype, $4,800; moving costs, $19,000; other miscellaneous services, $21,800; study contracts, $250,000.

Based on a feasibility study to be completed in Fiscal 1974, the Endowment will either contract with another government agency or an outside source to design, program and test an automated management information retrieval system. The cost is estimated to be $125,000. This does not include system implementation costs or subsequent operational costs, which are estimated at $75,000 for Fiscal 1975.

Administration of the Arts Endowment's growing programs has been assisted by periodic review of management policy, procedures and operations. Advice has been sought from the Office of Management and Budget and the General Accounting Office. Three years ago, the Endowment retained the services of a management procedures specialist. Last year a policy and operations task force reviewed the overall operations of the Agency and is preparing a report and recommendation on steps the Endowment should consider taking to insure sound, long-range planning. Acting on the preliminary recommendations and after consultation with the Comptroller General of the United States, the Endowment recently employed a full time management analyst. It is anticipated that $50,000 will be needed for study contracts in this very important area.

NOTE: Contracts using program development and evaluation monies for other services have been discussed earlier in this document.

26.0 SUPPLIES AND MATERIALS

FY 1974 - $102,400 FY 1975 - $127,300

Increase - $24,900

National Endowment for the Arts..... $ 14,000

National Endowment for the Humanities..... $ 13,300

Shared Staff..... $100,000

This amount will be required for books, technical publications, subscriptions, supplies for copying equipment, and "desk top" items such as pens, paper, typewriter ribbons, etc.

31.0 EQUIPMENT

FY 1974 - $75,000 FY 1975 - $160,000

Increase - $85,000

This estimate covers the cost of various items of equipment and office machines to support the activities of the Foundation.

SMITHSONIAN INSTITUTION

FISCAL YEAR 1975 ESTIMATES OF APPROPRIATIONS

GENERAL STATEMENT

Organization and Performance

Founded in 1846, the Smithsonian Institution is an independent establishment devoted to public education, basic research, and national service in the arts, sciences, and history. Centered on the Mall in Washington, D. C., it also operates major facilities and activities elsewhere in Washington, across the country, and overseas.

One of the world's leading research centers, the Smithsonian is also the world's largest museum complex, attracting, with the Zoo, more than twenty million visitors yearly as well as additional millions who view traveling exhibits. As custodian of the national collections, it possesses more than seventy million objects and specimens, about three percent of which are on public display while the rest are available for scholarly research by Smithsonian staff and many hundreds of visiting students, scientists, and historians each year.

The Smithsonian complex consists of ten major exhibition buildings in the fields of science, history, technology, and art, including the recently acquired Hillwood estate; a zoological park; a preservation and storage facility at Silver Hill, Md.; a conference center at Elkridge, Md.; two natural preserves, in Panama and on the Chesapeake Bay; the innovative Anacostia Neighborhood Museum which operates in a low-income area of the city in cooperation with the local community; an oceanographic sorting center in Tunisia, whose work parallels the programs of the Institution's oceanographic center in Washington; an observatory at Mt. Hopkins, Ariz.; and supporting administrative, laboratory, and storage areas.

A wide range of programs is conducted in cooperation with other institutions, universities, and government agencies here in the United States and on every continent. Many of the research projects in nations abroad are funded through the use of excess foreign currencies. More than 1,000 research publications, exhibit catalogues, education pamphlets, information leaflets, etc. were prepared in the past year. Other communication activities include radio, television, motion picture programs, and the successful new magazine, Smithsonian, which now has over 500,000 subscribers.

Program emphasis in FY 1975 will be concentrated on the following activities: opening the Hirshhorn Museum and Sculpture Garden by the fall of 1974; preparation for the Institution's participation in the Washington, D. C., American Revolution Bicentennial effort as well as scholarly efforts and traveling exhibits that will have national significance; building construction, research, collections restoration, and exhibits preparation pointing towards the opening of the National Air and Space Museum on July 4, 1976; and the continuing phased implementation of the Master Plan for the National Zoological Park.

Management Effectiveness

During FY 1974 several significant changes to the internal organizational alignment of the Institution have been accomplished. These actions are designed to increase management effectiveness (utilizing existing manpower and dollar resources) by aligning related or complementary functions or by strengthening the ability of certain major museums and galleries to administer directly key aspects of their programs. Notable among these changes are the following:

--Transfer of personnel and associated resources from the Office of Exhibits Programs to the National Museum of History and Technology, National Museum of Natural History, and National Air and Space Museum to help meet the ongoing and expanding exhibits programs of these national museums. A small Office of Exhibits Central has been retained to provide certain specialized and other services.

--Reorganization of the Buildings Management Department to form the Office of Facilities Planning and Engineering Services (OFPES) and the Office of Plant Services (OPLANTS). Planning and design, engineering, architectural, and construction supervision functions have been concentrated in OFPES to permit more effective development, review, and management of alteration, renovation, and construction projects. Responsibility for the physical maintenance and operation of buildings and facilities has been centered in the Office of Plant Services. This office's custodial and labor forces, however, have been administratively assigned to the museum and office directors who have direct responsibility for the condition of the buildings.

--Transfer of elevator operators from the Buildings Management Department to the Office of Protection Services to strengthen the latter's ability to control access to non-public areas.

--Transfer of the mail and messenger staff from the Office of the Registrar to OPLANTS in order to align them more closely with necessary vehicle services.

--Transfer of Elementary and Secondary Education personnel and resources to the National Museum of Natural History, the National Museum of History and Technology, the National Air and Space Museum, the National Collection of Fine Arts, and the National Portrait Gallery to permit the respective directors to provide greater direction and focus in the development of educational programs. A small central office will provide overall coordination as a broad service to the public.

--Incorporation of the Print Shop (formerly under the Smithsonian Institution Press), the Duplicating Section, and the Photographic Services Division to form the Office of Printing and Photographic Services. This action was taken to centralize in-house reproduction capabilities.

Consolidation of Appropriation Accounts

At the request of the Office of Management and Budget, the Smithsonian has consolidated several appropriation accounts. The Science Information Exchange has been incorporated into the Salaries and Expenses account. The three separate construction accounts--Restoration and Renovation of Buildings; Construction and Improvements, National Zoological Park; and Construction--have been combined to form a single, new account entitled Construction, Restoration, Repair, and Improvements.

For FY 1975 the Institution is requesting the following appropriations:

	1974 Appropriations	Requested 1974 Supplemental	Requested 1975 Increase	1975 Estimates
Salaries and Expenses:	$57,088,000	$3,203,000	$11,268,000	$71,559,000
Salaries and Expenses	55,438,000	3,158,000	11,193,000	69,789,000
Science Information Exchange	1,650,000	45,000	75,000	1,770,000
Special Foreign Currency Program	4,500,000	-0-	-0-	4,500,000
Construction, Restoration, Repair, and Improvements:	21,860,000	-0-	-535,000	21,325,000
Construction and Improvements, National Zoological Park	3,790,000	-0-	6,210,000	10,000,000
Restoration and Renovation of Buildings	1,070,000	-0-	255,000	1,325,000
Construction (Appropriation to Liquidate Contract Authority)	17,000,000	-0-	-7,000,000	10,000,000
Total	$83,448,000	$3,203,000	$10,733,000	$97,384,000

Highlights of the budget requests are as follows:

A. Salaries and Expenses

1973 Appropriation	1974 Estimate	1975 Estimate
$53,233,000	$60,291,000	$71,559,000

This appropriation provides for the regular operating programs in the museums, galleries, zoological park, research laboratories, and other program units; for special programs of an Institution-wide nature (such as the American Revolution Bicentennial program); and for program support activities. This funding is allocated by major groups as follows: (Organizational allocation appears on pages A-2 and A-3.)

	1974 Base	Requested Increase	1975 Estimate
Science.....	$23,760,000	$3,113,000	$26,873,000
History and Art.....	8,696,000	619,000	9,315,000
Public Service.....	2,123,000	218,000	2,341,000
Museum Programs.....	4,510,000	1,029,000	5,539,000
Special Programs.....	3,110,000	2,503,000	5,613,000
Administration, Protection, and Support.....	9,127,000	1,844,000	10,971,000
Plant Services.....	8,965,000	1,942,000	10,907,000
Totals	$60,291,000	$11,268,000	$71,559,000

In February 1973 an annual conference was initiated by Smithsonian management to define goals and priorities. One of the important outcomes was the determination that

the capabilities of many of the administrative and technical support activities and functions, e.g., conservation, libraries, registration, and data processing, have not kept pace with growing program performance demands. As a result, productive efforts in such areas as research, curation, and exhibition have been made more difficult and in some cases impossible. Accordingly, the decision was made to defer all but essential program growth, almost entirely associated with the Bicentennial effort, in order to make a concerted effort in FY 1975 to correct the imbalance of funds available for support services.

Major purposes to be served by the requested funding increase include:

1. Support Increases: $4,744,000

--Registration - to permit proper and efficient registration of accessions to the collections and recording of original documents and to ensure prompt handling of public inquiries many of which relate to collections ($134,000)

--Conservation - to establish sufficient capability for specialized treatment and analytical services required to prevent deterioration and loss of the collections and to increase technician support for the physical maintenance of the collections ($458,000)

--Libraries - to permit the acquisition and processing of library materials required to serve increasing research and exhibit efforts ($491,000)

--Automatic Data Processing - to increase the application of computer technology in the scientific research and collections management areas ($163,000)

--Photography - to provide an improved capability for the microfilming of Institution documents and the production of prints and slides requested by scientists, curators, and the public ($68,000)

--Printing and Reproduction - to provide editorial assistance for the production of exhibit catalogues and research publications and to fund the increase in printing costs resulting from inflation and larger volume ($178,000)

--Archives - to improve capabilities for identifying, preserving, and maintaining materials necessary for documenting Smithsonian history and objects and specimens in the collections ($130,000)

--Public Orientation and Education - to expand the Institution's outreach efforts and its ability to provide educational materials, tours, etc. ($246,000)

--Protection - to provide adequate protection and security of buildings, exhibits, collections, and visitors ($777,000)

--Buildings and Facilities Management - to fund custodial, maintenance, and transportation requirements ($1,384,000)

--General Administration - to provide assistance in executive management, purchasing, property control, personnel, accounting, legal matters, facilities planning and engineering, and supportive clerical work ($715,000)

2. Program Increases (Bicentennial Related): $3,599,000

--Preparation of exhibits, scholarly projects, and national outreach activities for the American Revolution Bicentennial ($2,506,000)

--Research and exhibits planning and preparation for the new National Air and Space Museum ($1,093,000)

3. Program Increases (Other): $25,000

--Additional grants under the National Museum Act in behalf of the museum profession ($99,000)

--Program offsets in the Hirshhorn and Major Exhibition programs (-$74,000)

4. Uncontrollable Increases: $2,900,000

--The projected higher cost of current employees caused by legislated pay raises, periodic step increases, extra work day, and higher Social Security costs for General Schedule and Wage board employees ($1,856,000)

--The additional cost of space currently provided by the General Services Administration (pursuant to the Public Buildings Amendments of 1972) and the cost of additional space requirements ($964,000)

--Postage indicia rate increases and related insurance costs on non-Smithsonian property, when required by the lender ($80,000)

B. Special Foreign Currency Program

1973 Appropriation	1974 Appropriation	1975 Estimate
$3,500,000	$4,500,000	$4,500,000

This appropriation will provide level funding to continue a program of grants to United States institutions for field research in those countries where "excess" local currencies are available. Research will be performed in the following general areas of Smithsonian Institution interest and competence: archeology and related disciplines, systematic and environmental biology, astrophysics and earth sciences, and museum programs. In addition funds are included for the second of four annual payments, each of $1,000,000 equivalent in "excess" Egyptian pounds, to UNESCO's international campaign to preserve archeological monuments in Nubia.

C. Construction, Restoration, Repair, and Improvements

1973 Appropriation	1974 Appropriation	1975 Estimate
$18,689,000	$21,860,000	$21,325,000

--Construction and Improvements, National Zoological Park ($10,000,000) - Continued phased implementation of the approved Master Plan by construction of the Elephant House and Bird House environs, planning and initial construction phases of the general service and parking facility, construction of the education and administration building, planning of future projects, and buildings and facilities repairs

--Restoration and Renovation of Buildings ($1,325,000) - Mt. Hopkins Observatory power, road, and water improvements; National Zoological Park Animal Conservation Center repairs and modifications; History and Technology Building and Natural History Building fire control systems; Arts and Industries Building renovation; South Yard visitor improvements, and other repairs and improvements to buildings and facilities

--Construction ($10,000,000) - Appropriation to liquidate contract authority

Details on each of these operating and construction programs appear in the following sections of this budget.

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SALARIES AND EXPENSES

Summary of Increase

S&E Appropriation Act, FY 1974	$55,438,000
S&E Proposed Supplemental, FY 1974	3,158,000
SIE Appropriation Act, FY 1974	1,650,000
SIE Proposed Supplemental, FY 1974	45,000
Base for FY 1975	$60,291,000
FY 1975 Request	71,559,000
Requested Increase	$11,268,000

SMITHSONIAN INSTITUTION
"Salaries and Expenses"
Summary of the 1973 Appropriation and the 1974 and 1975 Estimates

(Dollars in thousands)

Unit	1973 Actual		1974 Estimate				1975 Estimate		Analysis of Increase		
	Pos.	Amount	Pos.	Amount	Supplemental	Total	Pos.	Amount	Pos.	Uncontrollable	Program
Science											
Assistant Secretary for Science	9	198	7	126	17	143	8	159	1	6	10
National Museum of Natural History	363	6,389	371	7,086	503	7,589	384	8,004	13	219	196
Astrophysical Observatory	57	2,961	57	3,073	122	3,195	67	3,439	10	42	202
Tropical Research Institute	58	939	58	921	58	979	63	1,108	5	34	95
Radiation Biology Laboratory	48	1,326	48	1,373	53	1,426	50	1,492	2	26	40
Office of Environmental Sciences	33	716	35	732	49	781	35	800	-	19	-
Office of International Activities	10	178	11	181	16	197	11	204	-	7	-
Chesapeake Bay Center	10	236	15	232	12	244	21	415	6	9	162
National Air and Space Museum	91	1,063	114	2,436	125	2,561	137	4,063	23	195	1,307
Center for the Study of Man	12	271	14	282	14	296	14	304	-	8	-
National Zoological Park	286	4,074	286	4,356	298	4,654	306	5,115	20	186	275
Science Information Exchange	-	1,600	-	1,650	45	1,695	-	1,770	-	75	-
Subtotal Science	977	19,951	1,016	22,448	1,312	23,760	1,096	26,873	80	826	2,287
History and Art											
Ass't Secretary for History & Art	9	242	11	187	19	206	13	263	2	7	50
Museum of History and Technology	192	2,787	197	3,601	253	3,854	197	4,093	-	118	121
National Collection of Fine Arts	75	1,368	79	1,517	90	1,607	82	1,714	3	44	63
National Portrait Gallery	43	1,031	44	1,080	64	1,144	50	1,260	6	26	90
Hirshhorn Museum & Sculpture Garden	23	1,140	37	1,269	32	1,301	52	1,275	15	20	-46
Freer Gallery of Art	14	182	14	191	15	206	18	280	4	7	67
Archives of American Art	11	200	12	218	16	234	13	284	1	7	43
Nat'l Armed Forces Museum Advis Bd	6	146	6	136	8	144	6	146	-	2	-
Subtotal History and Art	373	7,096	400	8,199	497	8,696	431	9,315	31	231	388
Public Service											
Ass't Secretary for Public Service	6	178	8	126	13	139	11	234	3	5	90
Anacostia Neighborhood Museum	18	261	21	302	17	319	21	382	-	11	52
International Exchange Service	9	152	9	168	8	176	9	181	-	5	-
Division of Performing Arts	9	313	10	339	17	356	10	362	-	6	-
Office of Public Affairs	12	405	12	284	26	310	12	318	-	8	-
Smithsonian Institution Press	25	801	26	787	36	823	27	864	1	16	25
Subtotal Public Service	79	2,110	86	2,006	117	2,123	90	2,341	4	51	167

Unit	1973 Actual Pos.	1973 Actual Amount	1974 Estimate Pos.	1974 Estimate Amount	1974 Estimate Supplemental	1974 Estimate Total	1975 Estimate Pos.	1975 Estimate Amount	Analysis of Increase Pos.	Analysis of Increase Uncontrollable	Analysis of Increase Program
Museum Programs											
Ass't Secretary for Museum Programs	9	296	9	321	16	337	12	413	3	7	69
Conservation-Analytical Laboratory	14	263	19	361	16	377	26	571	7	9	185
Office of Exhibits Central	59	2,314	69	1,174	73	1,247	69	1,285	-	38	-
Office of the Registrar	17	221	17	245	14	259	23	347	6	10	78
Smithsonian Institution Libraries	63	1,034	65	1,107	71	1,178	86	1,673	21	38	457
Traveling Exhibition Service	-	25	5	75	1	76	5	77	-	1	-
National Museum Act	3	793	3	899	2	901	3	1,000	-	-	99
Smithsonian Archives	7	108	7	126	9	135	10	173	3	4	34
Subtotal Museum Programs	172	5,054	194	4,308	202	4,510	234	5,539	40	107	922
Special Programs											
Amer Revolution Bicentennial Prog	2	754	2	1,715	13	1,728	2	4,236	-	2	2,506
Environmental Sciences Program	8	272	8	175	7	182	8	185	-	3	-
Major Exhibition Program	-	910	-	108	-	108	-	80	-	-	-28
Academic and Educational Programs	23	684	13	619	23	642	13	662	-	14	6
Research Awards Program	-	450	-	450	-	450	-	450	-	-	-
Subtotal Special Programs	33	3,070	23	3,067	43	3,110	23	5,613	-	19	2,484
Administrative & Support Activities											
Office of the Secretary	27	655	30	605	49	654	33	736	3	19	63
Office of the General Counsel	10	230	11	222	20	242	13	295	2	7	46
Office of the Treasurer	35	725	36	788	36	824	42	1,103	6	101	178
Office of Personnel Administration	33	495	33	483	38	521	36	620	3	18	81
Office of Audits	6	142	8	138	12	150	9	170	1	5	15
Office of Equal Opportunity	3	89	5	93	8	101	5	104	-	3	-
Printing and Photographic Services	36	625	37	703	50	753	42	835	5	21	61
Information Systems Division	17	319	18	349	32	381	22	463	4	11	71
Supply Division	21	392	23	425	25	450	25	503	2	13	40
Management Analysis Office	10	192	11	187	16	203	12	225	1	7	15
Office of Protection Services	355	3,965	400	4,156	259	4,415	482	5,363	82	209	739
Facilities Planning & Eng Services	20	390	20	403	30	433	23	554	3	10	111
Office of Plant Services	492	7,733	529	8,508	457	8,965	614	10,907	85	1,242	700
Subtotal Admin & Support Act	1,065	15,952	1,161	17,060	1,032	18,092	1,358	21,878	197	1,666	2,120
Total	2,699	53,233	2,880	57,088	3,203	60,291	3,232	71,559	352	2,900	8,368

UNCONTROLLABLE INCREASES

The following additional funds are requested for largely uncontrollable costs resulting primarily from legislation. A total of $2,900,000 is requested for the following increased costs:

Necessary Pay and Related Benefits	$1,856,000
Space Rental	$964,000
Postage Indicia Rate Increase	$80,000

Necessary Pay and Related Benefits, $1,856,000 - This funding of $1,856,000 is for personnel compensation and personnel benefits for the projected higher costs in FY 1975 of the FY 1974 staff. These increases accrue to employees because of legislated pay raises and within-grade step increases; an additional paid work day; and higher social security payments on the part of the employer. A chart showing Necessary Pay by organizational unit is located on page A-8. These costs are calculated on a position-by-position analysis. The cost has been reduced by such factors as turnover and lapse savings. Absorption of these costs reduces the funds available for spending in other object classes. This can seriously handicap programs. In FY 1974 the Smithsonian Institution did absorb $284,000 of its necessary pay requirements. Since this absorption diverts funds permanently into personnel compensation and benefits, it is not possible to fund any of the necessary pay in FY 1975 without curtailing spending in other objects. This would be particularly difficult at a time when funds are being sought to strengthen support areas and the Bicentennial program.

(1) Annualization of Pay Increases ($789,000) - The FY 1974 proposed supplemental appropriation is in the amount of $3,203,000 ($3,158,000 for Salaries and Expenses and $45,000 for Science Information Exchange). Included in the supplemental is $2,517,000 for the General Schedule (GS) employees. The annual cost of the January 1973 GS increase was $1,550,000. The part-year cost of the October 1973 GS increase was $967,000. Also included in the proposed supplemental is $641,000 for Wage board increases. This includes the following wage actions: $221,000 for additional costs for the October 1972 and April 1973 Wage raises which were underestimated in the FY 1974 estimates because of their timing and $420,000 for the October 1973 Wage increase. A distribution of the supplemental by organization unit is found on pages A-2 and A-3.

A request is being made to fund the costs of the October 1973 General Schedule and Wage raises on an annual basis in FY 1975.

General Schedule: The General Schedule pay raise which was effective October 14, 1973, must be annualized in FY 1975. Funds are sought to finance the costs of this raise from July 1 through October 13. With the $967,000 requested in the supplemental for FY 1974 and the $589,000 requested here, the cost of this raise is $1,556,000.

Wage: The Wage pay raise which was effective October 28, 1973, must also be annualized in FY 1975. The Smithsonian Institution employes over 760 Wage employees. Prevailing practices call for the Wage pay scales to be reviewed periodically by the Civil Service Commission to determine how they compare to wages paid similar private employees in the same geographical area. In the Washington area this has resulted in the Wage employees receiving a pay increase in about October of each year. It was found this past October that employees in Wage grades 1 through 3 were being underpaid 50 cents per hour. Many of the janitor and custodial personnel are in these grades. There are 269 employees currently in these grades. This has added considerably to the cost of this raise. An amount of $200,000 is required to annualize funding.

(2) Step Increases ($884,000) - In any one fiscal year, the costs of periodic step increases are doubly felt. First, is the additional cost of financing the full-year costs of the periodics granted in the previous year; and second, the additional costs of new periodic increases granted.

General Schedule: The Government Employees Salary Reform Act of 1964, Public Law 88-426, provides for General Schedule employees to receive increases in pay at periodic intervals, Such an increase must be granted unless an employee is not performing at an acceptable level of competence. A negligible number of within grades are withheld each year. Provisions in the same law provide for outstanding performance by any employee to be recognized by a "quality step". An average of 150 employees are so designated each year. The average grade for General Schedule employees at the Smithsonian is 8.3. The cost of a within-grade in General Schedule grade 8 is currently $399 including personnel benefits. This request averages only $351 per employee. Some 2,100 employees are involved in this review. About $734,000 is required.

Wage: Periodic increases in pay for Wage employees are accorded by law and prevailing practices. The "steps in grade" stopped at step 3 until FY 1973 when they were extended to include 5 steps. This will mean that the costs of these actions will increase as more people will be receiving them for a longer period before reaching the top of the grade. In FY 1973 employees in step 3 went to step 4. The waiting period between steps is two years. Therefore, a large number of employees, estimated at over 300, will go to step 5 in FY 1975. Wage board steps cannot be denied an employee who has spent the time in grade. An amount of $150,000 is required.

(3) Extra Work Day ($153,000) - Employees' normal yearly compensation is based on being paid for 260 days per year. Some years have 261 work days and when leap year occurs there are 262. FY 1975 will have 261 work days; therefore, additional funding of $153,000 is required to finance employees' salaries and benefits for that additional paid day.

(4) Social Security Benefits - Employer's Contribution ($30,000) - New provisions to the law will have two effects on the employer's contribution for these benefits. First, as of January 1, 1974, the salary amount covered by the law has been increased from $10,800 to $12,000. Second, the percent of contribution on both the part of the employee and the employer has increased from 5.85 percent to 6.35 percent. About 300 employees are covered by Social Security during any year. These employees are temporary and therefore do not pay into the Civil Service Retirement Funds. The average cost is about $100 per employee. Additional costs to the Smithsonian are estimated at $30,000.

Space Rental, $964,000 - An appropriation of $964,000 is requested to fund obligations pursuant to the Public Buildings Act of 1972, Public Law 92-313 or for equivalent space as best serves the needs of the Institution. Of this amount, $724,000 represents the General Services Administration's estimate of the net additional cost of space now provided by or through them. The balance, $240,000, represents an estimate of the cost of additional space requirements but is included in this request for purposes of consolidated presentation.

All Smithsonian museums and galleries, and most of its other research and collections management facilities, are independently administered by the Institution under its Board of Regents. Some additional space, also directly administered by the Institution, is rented directly from commerical sources. As a third category, the Smithsonian occupies considerable space through the GSA in a number of buildings in Washington, D.C.; Rockville, Maryland; New York; and Alexandria, Virginia. These facilities consist of space controlled directly by GSA and special purpose space leased by GSA. In the past, GSA administered space was obtained by the Institution in one of several ways. First, GSA was reimbursed annually for payments to commercial owners. Second, Smithsonian appropriated funds for the cost of rent and utilities

were transferred permanently to the Public Buildings' appropriation. Over the past 15 years, these transfers have totaled $248,000 for space still used by the Institution. Third, in three instances, space was provided by GSA at no charge to the Institution.

With the passage of the Public Buildings Act of 1972, the procedure has changed. The Public Buildings Service appropriation has been eliminated for FY 1975 without returning the funds previously transferred from the agencies. For the Smithsonian Institution this means a "loss" of $248,000. All space users will now have to reimburse GSA for its costs (including rentals from commercial owners and its administration) and, in addition, make a contribution to establish a fund to finance possible future new construction by the Federal Government.

As shown in the table on page A-9, the total amount of the reimbursement required by GSA in FY 1975 will be $978,000 of which $254,000 is currently available to the Institution. The balance of $724,000 is requested in the FY 1975 appropriation.

Although the Smithsonian sees the value of this plan for providing funding for future construction needs of the Federal Government, it is unlikely that the Smithsonian will benefit from this fund because of the specialized nature of its facilities and its well-established procedures through the Executive and Legislative branches to acquire new buildings.

There is an important additional consideration in presenting this budget request for review. A significant objective of the Public Building Fund is to create more effective use of space as a by-product of direct funding responsibility. This is also of prime importance to the Institution. It is the intention of the Institution in presenting this consolidated space rental funds request to apply the funds (either by continued use of some or all of the space now under GSA or by carefully choosing alternate space in the Washington, D. C. area or elsewhere) in such a way or ways that will best serve Institutional needs. In this selection process, maximum attention would be given to seeking adequate space in a single location in order to consolidate activities, thus resulting in more efficient operations. Indeed, an active search for space is now underway. Some financial advantages may result.

There are certain additional important space requirements which may be met by the space selection process outlined above, provided adequate funding is available to serve all needs. The funding request contains, in one instance, a half-year lease situation. The GSA Depot, Building #3, Alexandria, Virginia, is scheduled for transfer to the City of Alexandria in mid-FY 1975. Full-year replacement space funding will be required. Second, the National Air and Space Museum is now engaged in the production of exhibits for the new Air and Space Building. As each exhibit is completed and demonstrated, it is programmed for container storage in anticipation of its installation in the new building. A storage facility will be required for these exhibit "packages." Third, some additional or alternate space for program administration may be required in the budget year. An amount of $240,000 is requested to meet these needs.

Postage Indicia Rate Increases, $80,000 - Some 3,000,000 pieces of first-class mail are sent yearly (including considerable foreign mail). This includes answers to inquiries from government and private institutions and the general public and the announcement of various musical events, film showings, and special exhibitions. About $240,000 is in the FY 1974 budget for mail costs at current rates. The cost of first-class postage is expected to be increased from eight to ten cents per ounce in mid-FY 1974. Costs will be absorbed this year. An amount of $60,000 is sought for FY 1975. The costs of other first-class mailings and related insurance on non-Smithsonian property, when required by the lender, are also increasing. On a full-year basis, in FY 1975 these increases are expected to cost $20,000.

Necessary Pay
FY 1975
(Dollars in thousands)

Unit	Within Grades	Extra Day	Social Security	Wage	Annual GS-Oct	Total
Assistant Secretary for Science	3	1			2	6
National Museum of Natural History	134	25			60	219
Smithsonian Astrophysical Observatory	16	6	1		19	42
Smithsonian Tropical Research Institute	18	3		3	10	34
Radiation Biology Laboratory	8	3		5	10	26
Office of Environmental Sciences	7	2			10	19
Office of International Activities	4	1			2	7
Chesapeake Bay Center	6	1			2	9
National Air and Space Museum	34	6		3	18	61
Center for the Study of Man	5	1			2	8
National Zoological Park	40	13	5	27	101	186
Science Information Exchange					75	75
Assistant Secretary for History and Art	3	1			3	7
National Museum of History & Technology	71	12			35	118
National Collection of Fine Arts	29	4	1		10	44
National Portrait Gallery	16	2	1		7	26
Hirshhorn Museum and Sculpture Garden	14	2			4	20
Freer Gallery of Art	3	1			3	7
Archives of American Art	4	1			2	7
Nat'l Armed Forces Museum Advisory Board	2					2
Assistant Secretary for Public Service	2	1			2	5
Anacostia Neighborhood Museum	7	1		1	2	11
International Exchange Service	1	1		2	1	5
Division of Performing Arts	1	1	1	1	2	6
Office of Public Affairs	4	1			3	8
Smithsonian Institution Press	11	1			4	16
Assistant Secretary for Museum Programs	4	1			2	7
Conservation-Analytical Laboratory	6	1			2	9
Office of Exhibits Central	23	3		3	9	38
Office of the Registrar	6	1			3	10
Smithsonian Institution Libraries	26	3			9	38
Smithsonian Institution Traveling Exhibition Service					1	1
National Museum Act						0
Smithsonian Archives	2	1			1	4
American Revolution Bicentennial Program					2	2
Environmental Sciences Program	1		2			3
Major Exhibition Program						0
Academic and Educational Programs	11				3	14
Office of the Secretary	11	2			6	19
Office of the General Counsel	4	1			2	7
Office of the Treasurer	15	1			5	21
Office of Personnel Administration	12	2			4	18
Office of Audits	2	1			2	5
Office of Equal Opportunity	1	1			1	3
Office of Printing and Photo Services	4	2		5	10	21
Information Systems Division	6	1			4	11
Supply Division	9	1			3	13
Management Analysis Office	4	1			2	7
Office of Protection Services	151	17	9		32	209
Office of Facilities Planning and Engineering Services	4	2			4	10
Office of Plant Services	139	20	10	150	93	412
Total	884	153	30	200	589	1856

Federal Building Fund Space Cost Estimate
FY 1975
(Dollars Rounded)

Space	Use of Space	SI Funding Available FY 1974	GSA Funding Requirement FY 1975
1242 24th Street, N. W. Washington, D. C.	Exhibits production, publications distribution and exchange	None/1	$184,000
701 Lamont Street, N. W. Washington, D. C.	Printing and storage of shops, library, and collection items	None/2	116,000
2405 Martin Luther King Ave. Washington, D. C.	Anacostia Neighborhood Museum	$7,000	8,000
12441 Parklawn Drive Rockville, Maryland	Radiation Biology Laboratory	247,000	254,000
Washington Navy Yard Building 159 (partial)	Oceanographic Sorting Center	None	201,000
14th & Maine Ave., S. W. Liberty Loan Bldg. (partial)	Editing, performing arts, Armed Forces museum study, and international art activities	None	125,000
Building #3, Alexandria, Va.	General collections and administrative storage	None/3	80,000/4
GSA Depot, New York	History and technology collections	None	10,000
		$254,000	$978,000
Funding difference		$724,000	

/1 $57,000 transferred to GSA in FY 1959.
/2 $88,000 transferred to GSA in FY 1962 and 1963.
/3 $103,000 transferred to GSA in FY 1970 for full year.

} Total of $248,000 no longer available to Smithsonian.

/4 One-half year. Replacement space will be required at an annualized cost.

OFFICE OF THE ASSISTANT SECRETARY FOR SCIENCE

1973 Actual..... $198,000
1974 Estimate..... $143,000
1975 Estimate..... $159,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	7	1	8
11 Personnel Compensation.....	124	15	139
12 Personnel Benefits.....	11	1	12
21 Travel & Trans. of Persons.	4		4
25 Other Services.....	2		2
26 Supplies and Materials.....	1		1
31 Equipment.....	1		1
Total	143	16	159
Analysis of Increase			
Necessary Pay.....		6	
Support Funds.....		10	

ABSTRACT - This office is responsible for overall planning, coordinating, and reviewing the progress of the fourteen science bureaus and programs within the Institution. An increase of one position and funding of $10,000 is requested to meet the following support requirement: Public Orientation and Education - a science editor to bring the discoveries and achievements of the science bureaus to public attention. Necessary pay in the amount of $6,000 also is being sought.

PROGRAM - The Office of the Assistant Secretary for Science advises and assists the Secretary in planning, implementing, and reviewing the progress of Smithsonian science programs. The bureaus reporting to the Assistant Secretary for Science are the National Museum of Natural History, the Radiation Biology Laboratory, the Tropical Research Institute, the National Zoological Park, the National Air and Space Museum, the Astrophysical Observatory, the Office of International Activities, the Office of Environmental Sciences, the Chesapeake Bay Center for Environmental Studies, the Center for the Study of Man, the Science Information Exchange, and the Fort Pierce Bureau. This office is also responsible for the administration of the Research Awards and the Environmental Sciences Programs.

JUSTIFICATION OF $10,000 INCREASE (Public Orientation and Education) - The increase of activity in the science area requires a science editor ($10,000) to devote full-time attention and render a wide-ranging variety of services to a group of science bureaus. The science editor will be responsible for documenting in popular form the scientific work at the Institution's Office of International Activities; Office of Environmental Sciences; Radiation Biology Laboratory; Tropical Research Institute; Fort Pierce Bureau; Chesapeake Bay Center for Environmental Studies; Center for Short-Lived Phenomena, which alerts the press, public, and scientific community to the occurrence of major geological and biological events; and the National Air and Space Museum's developing research and exhibit programs as this Museum prepares to occupy its new building on the Mall in 1976.

NATIONAL MUSEUM OF NATURAL HISTORY

1973 Actual.....$6,389,000
1974 Estimate.....$7,589,000
1975 Estimate.....$8,004,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	371	13	384
11 Personnel Compensation.....	5,878	316	6,194
12 Personnel Benefits.....	500	27	527
21 Travel & Trans. of Persons..	120	5	125
22 Transportation of Things....	5	1	6
23 Rent, Comm. & Utilities.....	21	1	22
24 Printing and Reproduction...	12	46	58
25 Other Services.....	421	4	425
26 Supplies and Materials.....	182	4	186
31 Equipment.....	450	11	461
TOTAL	7,589	415	8,004
Analysis of Increase			
Necessary Pay.....		219	
Support Funds.....		196	

ABSTRACT - The National Museum of Natural History (NMNH) serves as a center for the natural sciences. It maintains large reference collections and conducts identification and documentation, research, collections management, exhibits, and education--including collaborative projects with universities and other institutions of learning. An increase of 13 positions and $196,000 is requested for FY 1975 to meet the following support requirements: (1) Conservation - 11 museum technicians ($100,000) to provide additional assistance for the care of the collections which grow at a substantial rate and are utilized increasingly each year; (2) Archives - a clerk-typist ($9,000) and additional funding of $21,000 to expand a program of training and curation for Indians who will work with the National Anthropological Archives; (3) Printing and Reproduction - an increase of $46,000 to fund the rising cost and increased volume of publication; and (4) Public Orientation and Education - a technical information specialist ($20,000) to make more information available to the public concerning the Museum's holdings and programs. Necessary pay requirements are an additional $219,000.

PROGRAM - This Museum serves as a national and international center for the natural sciences. It maintains the largest reference collections in the nation (over 60 million objects) and has the legal responsibility (20 U.S.C. 59) to serve as the ultimate Federal repository of all collections and objects of natural history, archeology, and ethnology made by agencies of the government when no longer needed by those agencies for investigations in progress. Additionally, the NMNH is the repository for numerous extremely valuable collections obtained from other sources, such as the scientific community and academic institutions, as well as many private individuals.

The scientists at the Museum conduct a broad program of basic research on man, plants, animals, fossil organisms, rocks, minerals, sediments, and materials from outer space. Their fundamental studies in systematics and biology are providing new information required for the solution of major problems of conservation, pollution, food production, improvement of medical knowledge, and for planning national and international programs leading to predictive ecology and environmental management.

The exhibits in the Museum attract over 3.5 million visitors each year, including many hundreds of thousands of school children in tours. In FY 1974, primary efforts in the exhibit area are being devoted to the production and installation of two core exhibits: "Ice Age Mammals and the Emergence of Man" and "It All Depends," an exhibit using new and innovative audio-visual techniques to graphically demonstrate principles of ecology. The Museum's education office provides assistance for elementary and secondary school groups, and many members of the scientific staff are involved in joint educational programs with universities by teaching courses, training graduate students, and conducting science seminars. The Museum also provides leadership in the improvement of museum techniques and collections management, especially through the application of computer technology.

JUSTIFICATION OF $196,000 INCREASE:

Conservation - Beginning in FY 1972 the Museum undertook a long-range program designed to correct operational inefficiencies resulting from the shortage of support personnel. With the support of the OMB and the Congress significant improvements have been made but the original goal of three staff assistants for each scientist, as recommended in 1969 by the Office of Science and Technology Panel on Systematics and Taxonomy in the Federal Government, has not been achieved. At this time the ratio of support staff to scientific staff is only 1.56 to 1 (see table). For the past two years an interim target ratio of 2 to 1 has been set, as discussed in previous budget presentations. When that ratio has been achieved the entire staffing situation will be reevaluated and a determination made as to the specific needs for further increase of the support staff. A request for FY 1975 of 11 positions ($100,000) is designed to achieve a ratio of 1.67 to 1. These additional support technicians will be used to improve the maintenance of the collections and prevent loss or damage to valuable specimens because of inadequate care.

Ratios of Man-Years of Effort Between Support and Professionals/1

FY	Support Staff	Scientists	Ratio
1972/actual	154	108	1.43:1.00
1973/actual	169	111	1.52:1.00
1974/estimate	173	111	1.56:1.00
1975/estimate	184	111	1.67:1.00

/1 Ratios apply to personnel assigned directly to science support. They exclude personnel in EDP applications, Exhibits, Education, and NMNH director's office.

Archives - A clerk-typist ($9,000) and additional funding of $21,000 are needed to support a program of instruction and on-the-job training for American Indians selected by the various Indian tribal Councils to work at the National Anthropological Archives. Pilot efforts, using funds drawn from other Museum activities, have resulted in the training of 14 young Indians. Representatives of the Zuni, Navajo, Southern Ute, Crow, Nez Perce, Makah, Chippewa, Winnebago, and Quapaw have requested that qualified young Indian scholars receive this training. To provide such service within a reasonable period, efforts must be increased. This training will help the Indians develop, preserve and use the historical records of their own tribes, and better understand their own culture and heritage. In the course of their work, through their knowledge of tribal history and personalities, the trainees will contribute to a better understanding of the vast collections of Indian material in the Museum, accumulated over a period of more than one hundred years, and increase immeasurably the value of these collections to present and future scholars. The major portion of these new funds will be used to pay the travel and living expenses of the Indian students selected by their tribal Councils to receive the training at the Museum.

Printing and Reproduction - The results of the research by the staff of the Museum are made available to the scientific community by means of publication. In the first six months of FY 1974, the NMNH staff submitted for publication an equivalent of over 14,000 manuscript pages for the established series: Smithsonian Contributions to Botany, Earth Sciences, Paleobiology and Zoology. Printing for the series is accomplished through a Government Printing Office (GPO) contract arrangement with commercial printers. Current printing costs average $14 per printed page, and this will increase by 8.4 percent in FY 1974 (per GPO circular letter #103 of 15 August 1973). Recent information from GPO has advised further that contract bidding will increase an additional 50 to 100 percent in FY 1975. The amount (approximately $115,000) in the base of the Smithsonian Press for this work is insufficient to meet even FY 1974 needs. An increase of $46,000 is requested to meet the rising cost and increased volume of production by the staff and permit timely publication of new science information.

Public Orientation and Education - One position (a technical information specialist) and $20,000 are requested to provide educational and explanatory information about the Museum of Natural History to the public. Many of the exhibits and scientific studies conducted are of great interest and value to visitors and to the thousands who write and telephone to request information on a whole host of technical and scientific subjects. These people are representative of the large majority of our population which is not reached through scientific journals and scholarly publications. Museum guides, topical brochures, and other popular publications are needed to present accurate, easily readable information in the manner most helpful to this vast segment of the American people.

SMITHSONIAN ASTROPHYSICAL OBSERVATORY

1973 Actual..... $2,961,000
1974 Estimate..... $3,195,000
1975 Estimate..... $3,439,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	57	10	67
11 Personnel Compensation.....	1,489	202	1,691
12 Personnel Benefits.....	127	17	144
21 Travel & Trans. of Persons..	92		92
22 Transportation of Things....	30		30
23 Rent, Comm. & Utilities.....	250		250
24 Printing and Reproduction...	17		17
25 Other Services.....	755	25	780
26 Supplies and Materials.....	135		135
31 Equipment.....	300		300
TOTAL	3,195	244	3,439
Analysis of Increase			
Necessary Pay.....		42	
Support Funds.....		202	

ABSTRACT - As part of the new joint Center for Astrophysics with Harvard College Observatory, the Smithsonian Astrophysical Observatory (SAO) pursues a broad program of research in eight principal areas: planetary sciences, high energy astrophysics, solar and stellar physics, atomic and molecular physics, geoastronomy, optical and infrared astronomy, radio astronomy, and theoretical astrophysics. Headquartered in

Cambridge, Massachusetts, SAO is developing a multi-purpose observatory on Mt. Hopkins in Arizona and is participating in data gathering networks around the world.

The FY 1975 budget request proposes a program increase of 10 positions and $202,000 to provide research support personnel in the following areas: (1) Printing and Reproduction - two positions and $31,000 to serve the preparation and printing of research publications; (2) Building and Facilities Management - two positions and $46,000 for operations at Mt. Hopkins; (3) General Administration - five positions and $73,000 for personnel, procurement, and financial management purposes; and (4) Automatic Data Processing - one position and $52,000, with funds for computer time for processing of astrophysical data. An additional $42,000 is sought for necessary pay.

PROGRAM - Since 1890, the SAO has pursued a broad program of astrophysical research, placing particular emphasis on those programs that promise to achieve scientific leadership for the Observatory and those programs which support National goals. Beginning with its pioneer studies of the relationship between solar energy and the terrestrial environment, SAO has remained at the forefront of modern astronomy, with interests ranging from cosmic energy sources to the solar system to the earth itself.

SAO's facilities include its headquarters and laboratories at Cambridge, Massachusetts; a multipurpose observatory on Mt. Hopkins in Arizona; a world-wide network of associated astrophysical field stations which observe artificial satellites, comets, and other celestial objects; and a network of automatic stations in the midwestern United States which photograph meteors.

During the past decade, the Observatory played a major role in the astronomical revolution that has changed man's understanding of the universe. Technological advancements have produced more sensitive instruments and improved the effectiveness of telescopes, providing a capability of observing more distant objects and cosmological events that took place tens of millions of years ago. Balloons, rockets, and satellites have provided a means of placing telescopes above the earth's turbid atmosphere, opening new windows for observing different radiation from the universe - gamma-rays, x-rays, ultraviolet light, and far infrared radiation.

A few of the highlights of SAO research follow:

FY 1973

--Publication of the Celescope Catalog of Ultraviolet Stellar Observations containing the results of the SAO experiment aboard the Orbiting Astronomical Observatory (OAO-2).

--Detection of new structural features in the African rift system based on images provided by the Earth Resources Technology Satellite (ERTS).

--Analysis of lunar samples returned by the Apollo and Soviet lunar missions.

--Detection of HD in the atmosphere of Jupiter and of inter-stellar lithium in the spectrum of Zeta Ophiuchi using the 60-inch telescope at Mt. Hopkins.

--Rediscovery of the asteroid Apollo last seen 41 years ago.

--Observation by radio astronomy of the interstellar molecules silicon monoxide (SiO), cyanoacetylene (HC3 N), and sulfur monoxide (SO).

FY 1974

--Publication of Blanketed Model Atmospheres for Early-Type Stars, a companion volume to the previously published Celescope Catalog, representing an analysis of the Celescope data as applied to stellar theory.

--Publication of SAO Standard Earth III, the latest calculation of the earth's shape and size with respect to gravitational variation and a uniform network of geodetic positions.

--The first identification of a probable "black hole" in the constellation Cygnus.

FY 1975 Expected

--Publication of major results from Skylab experiments.

--Flight of a rocket probe experiment to test the equivalence principle of Einstein's Theory of Relativity.

--Preparation of x-ray observation packages for the HEAOS satellites.

--Preparation of a spacecraft-to-spacecraft doppler tracking experiment for the Apollo-Soyuz space mission.

This extended view into deep space has overthrown the old concept of an "empty" universe. Indeed, no longer is the universe viewed as an unchanging, or at best slowly changing, cosmos of fixed stars. Instead, it is seen as a high energy explosive universe filled with objects defying imagination: exploding galaxies, pulsars, x-ray and gamma-ray stars, black holes, and neutrinos. Most exciting perhaps are the massive interstellar clouds of dust particles and complex molecules. Some of these clouds apparently are coalescing to form new stars much like our own sun. Still others seem to be collapsing inward to create black holes, those incredibly dense objects with a gravitational pull so great not even light can escape.---In short, modern astronomers now may be seeing, on one hand, how the universe began, and on the other, how it may end.

Clearly, the discoveries and advances made in astronomy during the past decade have been revolutionary, but the implications for the future are even greater and most surely will affect all aspects of human life, from genetics to energy production. To meet the challenges of the future and to increase SAO's effectiveness in this regard, the Smithsonian, along with Harvard University, created a new joint Center for Astrophysics in FY 1974. Under a single director, the Center has a unified program involving about 120 scientists at SAO and Harvard College Observatory. In order to meet more effectively the scientific needs at the working level, eight associate directors are charged with organizing and directing the research effort in eight broad areas: planetary sciences, high energy astrophysics, solar and stellar physics, atomic and molecular physics, geoastronomy, optical and infrared astronomy, radio astronomy, and theoretical astrophysics.

During FY 1974, the Smithsonian Astrophysical Observatory, under its new director, has been engaged in a critical study of SAO's programs. Unproductive programs are being phased out and new programs are being planned which will most effectively utilize the specific capabilities of the Observatory. A number of key personnel were added in FY 1974 in high energy astrophysics and theoretical astrophysics. The final result of this process will be increased effectiveness, through more efficient deployment of limited resources.

JUSTIFICATION OF $202,000 INCREASE - It is too early to predict the scientific expenditures which will be required to exploit properly the dramatic new opportunities described earlier. Therefore, SAO is not requesting any increase in FY 1975 for scientific programs. During this period of self-examination, however, it has become apparent that there are insufficient resources at SAO to sustain the core, Federally-supported scientific program which is under way at present. Hence, the Observatory seeks those resources required (1) to strengthen support and administrative functions in the interest of greater effectiveness; and (2) to bolster the capabilities of SAO for computational analysis, and thereby achieve greater efficiency.

In order to meet the scientific challenges of the early years of the past decade, SAO's Federal resources have had to be used to develop and maintain a corps of outstanding professional scientific and engineering talent for long-range research program development and continuity. Support of specific research projects, including the funding of support personnel in a wide variety of technical and administrative capacities, however, was predominately from grants and contracts. More recently, the mix of non-Federal and Federal resources has been undergoing dramatic changes. In FY 1967, non-Federal dollar resources constituted 82 percent of the total resources available to the Observatory. In FY 1974, this percentage has dropped to 61 percent. In part this change has been brought about by a de-emphasis of the Nation's space program (SAO's primary source of grants and contracts). But it has also been a product of more intensive development of SAO's own research interests and its choice of important scientific studies and facilities. A notable example is the development of the Mt. Hopkins Observatory with its array of specialized data-gathering equipment. This includes the multiple mirror telescope now being fabricated for operational use, beginning in FY 1976. These shifts of funding ratios and research developments now require that the Observatory develop a continuing and strengthened support personnel capability for its Federally funded research. Trained and capable administrative and technical personnel now employed on temporary grant and contract work at SAO are available for long-term assignment to serve the basic responsibilities of the Observatory. SAO proposes to transfer 10 of these valuable employees to its Federal employment in FY 1975. These positions include: two positions (an editor and offset press operator) and $31,000 to serve the preparation and printing of research publications; two positions (a field manager and supervisor) and $46,000 for facilities management at the Mt. Hopkins Observatory; five positions and $73,000 for general administration with emphasis on personnel, procurement, and financial management of research activity; and one position and $27,000 for mathematical applications of data processing of astrophysical information. An additional $25,000 is required for the purchase of computer time. This is a first significant step to provide adequate support personnel for important Federally-funded research programs.

SMITHSONIAN TROPICAL RESEARCH INSTITUTE

1973 Actual.....$ 939,000
1974 Estimate.....$ 979,000
1975 Estimate.....$1,108,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	58	5	63
11 Personnel Compensation.....	696	70	766
12 Personnel Benefits.....	59	7	66
21 Travel & Trans. of Persons..	35	4	39
22 Transportation of Things....	5	1	6
23 Rent, Comm. & Utilities.....	45	6	51
25 Other Services.....	48	19	67
26 Supplies and Materials.....	70	8	78
31 Equipment.....	21	14	35
TOTAL	979	129	1,108
Analysis of Increase			
Necessary Pay.....		34	
Support Funds.....		95	

ABSTRACT - The Smithsonian Tropical Research Institute (STRI), a research organization devoted to the study and support of tropical biology, education, and conservation, focuses broadly on the evolution of patterns of behavior and ecological

adaptations. The tropics offer a rich natural laboratory for these purposes. Panama further offers its unique zoogeographic characteristics--landbridge to terrestrial life forms of two continents and water barrier to marine life of two oceans.

For FY 1975, five additional positions and increased funding of $95,000 is sought to provide the following types of support: (1) Buildings and Facilities Management - a facilities engineer, a janitor/night watchman, and 2 game wardens for the care and protection of buildings and property ($34,000) and funds for building custodial and maintenance services, supplies, utilities, and maintenance and operation of vehicles and boats ($51,000) and (2) Public Orientation and Education - a docent or guide ($10,000) for public use of STRI's natural areas. An amount of $34,000 also is required for necessary pay.

PROGRAM - The Institute provides a base of operations and an intellectual center for advanced studies of ecology, behavior, and evolution in the tropics. Because of the diversity of tropical organisms and the complexity of their relationships, the tropics represent one of the most interesting but most poorly understood biological regions of the world. Many of the developing nations lie in or along the tropics, and it is here that major environmental changes are likely to occur during the next decade. Understanding and properly managing tropical environments is essential to their preservation as well as the protection of living systems elsewhere in the world. For example, the destruction of suitable feeding sites in Central and South America may result in the extinction of migratory birds even if their breeding habitats are preserved in the United States.

STRI's laboratory complexes in Panama provide immediate access to tropical forest and marine environments. These include almost 9,000 acres of forest reserve of Barro Colorado Island and the adjacent peninsulas in Gatun Lake; the coral reef and lagoon at Galeta Point on the Atlantic Coast; and the rocky reefs at Naos Island on the Pacific Coast. A small facility in Cali, Colombia, provides access to high forest in the Andes. The Institute's scientific staff, as well as many visiting scientists and students, conduct research in these areas as well as in other parts of Central and South America, the Pacific, Asia, and Africa, where comparative studies are clarifying the distinctive biological role of the tropics.

During FY 1974 the professional staff of STRI is 13, there are 10 long-term pre and post-doctoral students associated with STRI, and it is anticipated that the facilities will be used for shorter periods by a total of 459 visitors from all over the world. In 1973, 47 scientific papers were published in the world's leading scientific journals by staff and associates.

JUSTIFICATION OF $95,000 INCREASE:

Buildings and Facilities Management (4 positions; $85,000) - STRI's in-house research activities as well as its service to visiting researchers are accommodated in some 35 structures on Barro Colorado Island or provided by the Panama Canal Company, the Army, or the Navy at other sites. These structures require constant maintenance attention because of their age, type of construction, and rapid deterioration in the tropical climate. Renovation and repairs are accomplished by the use of staff maintenance personnel and the use of renovation funds but a large backlog of work exists. A facilities engineer ($19,000) is required to plan corrective measures, negotiate with and monitor the work of contractors, and supervise in-house maintenance personnel. A janitor/night watchman ($4,000) is related to the maintenance requirements as well as necessary after-hours protection of buildings.

For work in habitats away from its laboratories, STRI operates a fleet of small boats and canoes in Gatun Lake, a 42-foot vessel capable of extended trips in the marine environment, and several 4-wheel drive vehicles. Some of these were previously declared surplus by the military and are over 10 years old. An increase of $12,000 is requested to initiate a replacement program and to update repair facilities in order to keep this fleet operating efficiently with minimal fuel consumption.

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Increased pressures are being put on conservation areas under STRI's protection. Guarding against trespassing for logging, recreation, poaching, and even agricultural purposes requires increased vigilance. Two additional game wardens ($11,000) are needed to augment the present staff of two.

Additional support funding of $39,000 is needed to meet the costs of additional requirements, but more particularly price increases, for service contracts, utilities, maintenance supplies, and equipment.

Public Orientation and Education (1 position; $10,000) - Education at the STRI is mostly at the graduate level. Recently, the Institute has experimented with tours of Barro Colorado Island and the marine research facilities for college undergraduates, high school students, elementary school children, and community organizations. This public education has been a success and STRI feels that explaining the importance of the world's natural resources should become a permanent part of its program. This will require $10,000 to employ a docent and purchase educational aids.

RADIATION BIOLOGY LABORATORY

1973 Actual..... $1,326,000
1974 Estimate..... $1,426,000
1975 Estimate..... $1,492,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	48	2	50
11 Personnel Compensation.....	631	53	684
12 Personnel Benefits.....	53	5	58
21 Travel & Trans. of Persons..	12		12
22 Transportation of Things....	4		4
23 Rent, Comm. & Utilities.....	375		375
24 Printing and Reproduction...	5	5	10
25 Other Services.....	60	2	62
26 Supplies and Materials.....	75	1	76
31 Equipment.....	211		211
TOTAL	1,426	66	1,492
Analysis of Increase			
Necessary Pay.....		26	
Support Funds.....		40	

ABSTRACT - The Radiation Biology Laboratory (RBL) studies the influences of environmental factors--light, temperature, humidity, and atmospheric content--on plants in order to help understand their growth and development. An additional two positions ($32,000) for data reduction, mathematical analysis, and graphic presentation of solar energy data are requested with $8,000 support funds for computer time and printing of data. Necessary pay requirements for present staff amount to $26,000.

PROGRAM - Light is a key controlling environmental factor for the development and growth of biological systems. The storage of solar radiation as chemical energy in photosynthesis is basic for all life on earth. However, the utilization of this energy is regulated by subtle changing signals of light quality, duration, and intensity. A primary objective of the Laboratory's efforts is to explain the influences of the various factors in the environment--light, temperature, humidity, and atmospheric content--on the growth and development cycles of plants and to

characterize the mechanisms through which environmental signals eventually manifest their effects on the developmental processes in living organisms. This objective is accomplished by studying environmental influences on plant growth and development in the Laboratory under controlled conditions using biochemical, biophysical, and physiological techniques and then verifying the importance of these processes in nature by monitoring the natural, dynamic environment. Such programs of research by their very nature are long-term and require the concerted team efforts of many scientific disciplines. Disciplines represented at RBL include physiology, cytology, biochemistry, biophysics, physics, engineering, electron microscopy, and morphology.

The research of the Laboratory consists of three principal areas: (1) regulatory biology, (2) environmental biology, and (3) carbon-14 dating. From the initial charge that it be concerned with the effects of the sun's energy on earth's life, a major portion of the RBL's program has been devoted to the study of the responses of living organisms to various qualities and intensities of radiant energy.

Since its inception in 1928, the Laboratory has pioneered research on the influences of the spectral quality of visible light on plant growth and development.

The present experimental program is of greater scope than in any other single laboratory in the country and perhaps in the world. The Laboratory has been credited with major contributions in the field of photobiology.

JUSTIFICATION OF $40,000 INCREASE (Automatic Data Processing) - A significant deficiency exists in the environmental biology program, a research area of major emphasis that is primarily concerned with the measurement of solar radiation at the earth's surface that contributes to the existence and growth of living systems. Data has been collected and recorded at RBL monitoring stations (stations are now in Rockville, Maryland, Israel, Alaska, and Panama) from 1968 for daily periods from sunrise to sunset at three-minute intervals, measuring total energy and also recording energy in the spectral quality wavelengths that influence biological systems. There have been increasingly greater demands from the scientific community for specific data, as well as for the accumulated data on solar energy for the past five years because of the current international focus on the present and future importance of solar energy. In order for the mass of information to be made available and useful to workers in energy conversion fields and for meteorological and agricultural purposes, it must be analyzed and presented in tabular and graphical form.

In addition to collecting measurements in broadband wavelengths of blue, yellow, red, and ultraviolet light--those regions that influence life processes--RBL is now able to monitor the narrowband ultraviolet that is of particular interest in the health sciences. There is, for instance, an increasing interest in the study of changes in ultraviolet as associated with skin cancer frequencies. A new, sensitive scanning radiometer for measuring the distribution of energy in the narrowband ultraviolet has been developed in this laboratory, and data is being recorded. This information also must be processed and be disseminated. The RBL has no one on its staff to accomplish this work.

Two mathematicians ($32,000), plus $3,000 for supplies and computer time (at $86.00 per hour) are needed for reduction, analysis, and graphical presentation of the solar energy data. After reduction and plotting, the data must be published ($5,000). Initially, daily totals of incident energy, daily totals for each color-band measured, and intercomparisons of energy recorded at stations in three latitudes will be made available to scientists and others interested in the information.

OFFICE OF ENVIRONMENTAL SCIENCE

1973 Actual.....$716,000
1974 Estimate.....$781,000
1975 Estimate.....$800,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	35	0	35
11 Personnel Compensation.....	572	18	590
12 Personnel Benefits.....	49	1	50
21 Travel & Trans. of Persons..	26		26
22 Transportation of Things....	3		3
23 Rent, Comm. & Utilities.....	36		36
24 Printing and Reproduction...	7		7
25 Other Services.....	28		28
26 Supplies and Materials.....	33		33
31 Equipment.....	27		27
TOTAL	781	19	800
Analysis of Increase			
Necessary Pay.....		19	
Program Funds.....		0	

ABSTRACT - The Office of Environmental Sciences (OES) undertakes or coordinates research on the environment for improved understanding of natural systems which can be applied to policies to reduce or stabilize degradation of natural resources. On-going service and support activities include the Center for Short-Lived Phenomena and Oceanographic Sorting Centers in Washington and Tunis. No program fund increase is sought for FY 1975. A pay increase amount of $19,000 is needed for presently authorized staff.

PROGRAM - Several research projects dealing with selected aspects of ecosystems are in progress supported by Federal agency contracts. A four-year study of water-borne diseases in the Lower Mekong River is nearing completion. A post-impoundment ecological analysis of the reservoir on the Nam Ngum River, a Mekong tributary, will provide valuable insights into the probable ecological impact of the world's largest dam which is planned at Pa Mong, northeast of Vientiane, Laos. Other OES studies involve man-made lakes in South India and Ghana, oil spills in Indonesia, pollution of natural lakes in Yugoslavia and Tunisia, and impact on biota of environmentally hazardous pollutants flowing into the Caspian Sea.

Environmental research concerned with marine pollution, ocean dumping, pollutant monitoring, and environmental prediction will be continued at the Oceanographic Sorting Centers in Washington and Tunis, supporting the accelerated United States programs in marine and freshwater baseline monitoring. These increased Federal environmental activities necessitated an increase of bulk aquatic collections to provide a reserve of ecological baseline material for environmental assay and systematics research. The two Oceanographic Sorting Centers supply roughly 350 scientists from 200 agencies around the world with curatorial support, sampling design, biological analysis, and data management in addition to sorted specimens that are required to assess environmental impact on living species.

The OES is developing a new program of international ecological studies with special emphasis on research in tropical biological systems. The effort will be dedicated to producing a predictive capability in systems ecology applied to the use

of natural resources in the tropics, their degradation, and necessary steps to preserve or restore. A sense of urgency accompanies these studies since shortages of energy and raw materials will accelerate the exploitation of both renewable and non-renewable resources. This exploitation may cause alteration of vast undisturbed ecological systems of immense significance.

The Center for Short-Lived Phenomena operates a global environmental alert network for rapid communication of scientific data on biological and geological environmental events of short duration to scientists and officials with monitoring responsibilities. The Center's reports make it possible for scientists to conduct research while short duration events are occurring. The Center's unique capability has led the United Nations Environmental Program to request its help in organizing Earthwatch, the new UN worldwide environmental monitoring program. The first world directory of environmental monitoring organizations was compiled by the Center under a UN contract, and with UN encouragement it is now organizing a global student environmental monitoring network.

OFFICE OF INTERNATIONAL ACTIVITIES

1973 Actual.....$178,000
1974 Estimate.....$197,000
1975 Estimate.....$204,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	11	0	11
11 Personnel Compensation.....	172	6	178
12 Personnel Benefits.....	14	1	15
21 Travel & Trans. of Persons..	6		6
23 Rent, Comm. & Utilities.....	2		2
25 Other Services.....	2		2
31 Equipment.....	1		1
TOTAL	197	7	204
Analysis of Increase			
Necessary Pay.....		7	
Program Funds.....		0	

ABSTRACT - This office fosters and coordinates the Institution's scientific and cultural activities abroad and administers the Smithsonian's Foreign Currency Program. No program increase is sought for FY 1975. Funds in the amount of $7,000 are requested for necessary pay for existing staff.

PROGRAM - The Office of International Activities was established in 1965 to foster and coordinate the Smithsonian's scientific and cultural activities abroad. To this end, it is the Institution's point of liaison with the Department of State and diplomatic missions in Washington and with foreign governments and research institutions abroad.

Of special importance are efforts to foster Smithsonian scientific and cultural exchanges with the People's Republic of China and the Soviet Union. The office continues to support the Institution's world-wide environmental and conservation programs and the exchange of scholars and technicians as well as of cultural and scientific objects, information, exhibits, and the like in the interests of basic research and public education.

The office also administers the Smithsonian's Foreign Currency Program. This program of grants to United States institutions supports museum programs, scientific and cultural research, and related educational activities in eight countries where the United States owns local currencies in excess of its needs as determined by the Treasury Department. More than 220 such institutions in 32 states have benefited from the program. An appropriation of $4.5 million equivalent in "excess" foreign currencies is requested for fiscal year 1975. (See page B-1.)

CHESAPEAKE BAY CENTER FOR ENVIRONMENTAL STUDIES

1973 Actual.....$236,000
1974 Estimate.....$244,000
1975 Estimate.....$415,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	15	6	21
11 Personnel Compensation.....	164	76	240
12 Personnel Benefits.....	14	7	21
21 Travel & Trans. of Persons..	6	4	10
23 Rent, Comm. & Utilities.....	15	20	35
25 Other Services.....	26	19	45
26 Supplies and Materials.....	8	27	35
31 Equipment.....	11	18	29
TOTAL	244	171	415
Analysis of Increase			
Necessary Pay.....		9	
Support Funds.....		162	

ABSTRACT - The Chesapeake Bay Center for Environmental Studies (CBCES) is a natural area for research in complex land-water relationships and for use in creating public awareness and understanding of ecological systems as they may be affected by economic and social change. The FY 1975 budget shows an increase of 6 positions and $162,000 to provide the following support needs: (1) Public Orientation and Education - an environmental education program coordinator ($22,000) to develop the Center's full potential for meeting public use and interest; (2) General Administration - an administrative assistant and a clerk-typist ($25,000) to assist with office management and public use of the facility; (3) Buildings and Facilities Management - a maintenance worker and a custodian ($18,000) and an additional $84,000 for general care of the Center's property; and (4) Protection - an assistant resident manager ($13,000) for protection of property. An additional amount of $9,000 is needed for necessary pay.

PROGRAM - The Chesapeake Bay Center is a 2,500 acre area located on the Chesapeake Bay, seven miles south of Annapolis, Maryland, about equidistant from Baltimore and Washington. It was established in 1965 for the purpose of creating scientific and education programs in the environmental sciences leading to a more complete understanding of complex natural relationships and the proper balance of land-water uses as they relate to human health, welfare, and continued existence of life. The development of these programs was made possible by the acquisition (with non-appropriated funds) of a land-water unit large enough to include the full range of forests, marshes, fields, and agricultural areas that, taken together, form the mosaic of land uses characteristic of the mid-Atlantic region since settlement. The area is ideal for study of the results of man's past and present activities as vital components of interacting physical and biological systems. Thus, the Center now provides a living museum of contemporary and historical significance, a primary

resource for both teaching and research on complex living systems, and the largest facility in the nation available for the study of land-water (estuarine) relationships.

The research program is being conducted in conjunction with other Federal agencies and nearby universities. It is interdisciplinary in approach and has been developed as a long-term effort to understand the functioning of local ecosystems.

The educational programs, designed to supplement and enrich the science curricula of participating school systems and to develop ecological awareness in people of diverse ages and backgrounds, are expected to surpass research activities in emphasis in the next five years. This will be due (1) to the strategic location and unique nature of the Center, and (2) to the detailed understanding of the watershed-estuarine system available as a result of the research program. In no other area of the U.S. will it be possible to demonstrate the detailed functioning of such a system while simultaneously indicating the economic, social, and political implications of managing such a system. This aspect is of regional and national significance for both student training and general educational purposes, including information transfer activities. As a consequence of these facts, the educational programs carried out thus far, including ones of diverse character with groups of all ages but primarily ones involving students and teachers in school systems in Maryland, Virginia, and the District of Columbia, have proven to be highly successful.

JUSTIFICATION OF $162,000 INCREASE - Much of the research and education work at the Center has been initiated and funded by a variety of short-term grants and contracts from government and private sources. This funding has enabled the CBCES to demonstrate the value of its natural resources. While the Center will continue to pursue such sources of funds for special projects, they do have certain limitations. They do not provide continuity for programs which have proved to be valuable. They place heavy demands on staff and other in-house administrative and maintenance resources.

Public Orientation and Education - Educational activities have fallen short of realizing their potential public service as a result of personnel shortages. The Center has found it necessary to curtail educational activities so that only about 2,500 participants were able to be included in calendar year 1973 as compared with a planned 3,000. There is a need for a full-time education specialist ($22,000) to plan, conduct, and coordinate wider public use of the Center's resources.

General Administration - In addition to the permanent staff, the Center is now being used by 60 employees paid from grants and contracts, visiting researchers, and students doing projects, and some 2,500 participants in the education programs. Each of these people creates some additional administrative and clerical workload, which when added to the range of personnel actions, procurement, financial management, public inquiries, scientific correspondence, manuscript typing results in a total workload in excess of that which can be handled by the office management staff of three persons. An administrative assistant and a clerk-typist ($21,000) are required. Additional travel funds are required to enable the professional staff to review allied scientific programs and to give technical advice and consultation on the work of the Center ($4,000).

Buildings and Facilities Management - Twenty-five hundred acres, a range of old buildings (originally farm buildings) and trailers, and active use of the Center creates a daily demand and range of custodial and maintenance work beyond the capabilities of the present staff of six persons and their available funds. One additional maintenance worker and a custodian are required ($18,000). The requirements for utilities; maintenance contracts, supplies, and materials; boat and vehicle operations; and equipment (including the replacement of worn-out items) will cost an additional $84,000.

Protection - The value of the Center depends totally on being able to maintain it in its presently diverse state. There is a continuing threat of damage from vandalism, fire (man-made or naturally caused), or poaching. Protection at present is a responsibility of all employees. There is one full-time security guard. An additional resident manager position ($13,000) is requested to improve protection especially at night.

NATIONAL AIR AND SPACE MUSEUM

1973 Actual.....$1,063,000
1974 Estimate.....$2,561,000
1975 Estimate.....$4,063,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	114	23	137
11 Personnel Compensation.....	1,676	283	1,959
12 Personnel Benefits.....	142	25	167
21 Travel & Trans. of Persons..	23		23
22 Transportation of Things....	6		6
23 Rent, Comm. & Utilities.....	2	134	136
24 Printing and Reproduction...	36	10	46
25 Other Services.....	407	902	1,309
26 Supplies and Materials.....	122	145	267
31 Equipment.....	147	3	150
TOTAL	2,561	1,502	4,063
Analysis of Increase			
Necessary Pay.....		61	
Other Uncontrollable.....		134	
Program and Support Funds.....		1,307	

ABSTRACT - The National Air and Space Museum (NASM) was created to memorialize the national development of aviation and space flight; collect, preserve, and display aeronautical and space flight equipment of historical significance; and serve as repository for documentary materials. An increase of $1,307,000 and 23 positions is requested to continue preparation for the move of the NASM into its new building. Specifically, these increases are: (1) Curation of Exhibits - 5 positions ($65,000) and support funds ($63,000) to extend curatorial expertise and to prepare exhibit scripts, catalogues, and related materials; (2) Preservation and Restoration - 8 positions ($60,000) and support funds ($40,000) to continue work on the air and space craft to be used in the opening exhibition; (3) Presentations and Education - 2 positions ($27,000) and support funds ($68,000) to prepare shows for the spacearium/planetarium; (4) Exhibits production - 7 positions ($86,000) and support funds ($879,000) to step up exhibits production; (5) Administration - One position ($9,000) to assist with the clerical workload; (6) Printing and Reproduction - Printing funds ($10,000) to help finance exhibit catalogues. Necessary pay in the amount of $61,000 is being sought as well as $134,000 space rental in the Uncontrollable section of the estimates (see page A-6).

PROGRAM - The Smithsonian's appropriation act for FY 1973 provided $40 million in construction authority for a new (but empty) NASM Building. This building which is now under construction is scheduled to open on July 4, 1976, as a major Bicentennial attraction. Construction is on schedule. The building will contain approximately 200,000 square feet of exhibits space. Twenty-five major exhibition halls are being planned for the new structure.

The NASM has spent the last two years building staff; creating prototype exhibits using a blend of the best museum practices with new audio-visual and mechanical visitor participation and involvement concepts; restoring air and spacecraft for display; and overseeing the construction of the building.

JUSTIFICATION OF $1,307,000 INCREASE - All current efforts, as well as required new resources, must be pointed toward the realization of a successful opening befitting the new museum building. This requires research in the history, theories, techniques, accomplishments, and potential of air and space flight in order to present exhibits that are accurate, educational, and dynamic. Many additional air and spacecraft now in storage at the Silver Hill, Maryland, facility must be restored for display. Specifically the increase is requested for:

Curation of Exhibits - Five additional curators and research assistants ($65,000) must be employed to increase curatorial input relative to the preparation of exhibit scripts. Additional funding for research materials, services, and equipment is needed ($63,000). There are presently 14 curators and research assistants to plan, research, and write comprehensive and well documented scripts for planned exhibits, covering the factual and educational material and objects that will be presented to the museum visitor. Curators are present at each stage of the exhibit's design, production, and installation to assure its quality and authenticity. During FY 1975 ten major exhibit halls must be in stages of planning, design, and production in order to meet opening date deadlines. A curator for general aviation and one for aeronautical transportation are requested for the department of aeronautics. A curator for manned and unmanned satellites and one for launch vehicles and guided missiles are requested for the department of astronautics. A curator for technology applications and utilizations is requested for the department of science and technology.

Preservation and Restoration - Eight additional skilled craftsmen and helpers are needed ($60,000) with funding ($40,000) for supplies and materials and equipment to assist with the preservation and restoration of aircraft and spacecraft. There are 60 air or spacecraft in need of restoration and/or preservation in order to be placed on public view. Of these 60 craft in need of work, 20 have already been completed. The average craft takes 2 man-years of work to be put in exhibitable condition. Additional staff (museum aids and technicians) are required to complete work for the opening exhibit. These employees also are responsible for moving and placing of air and spacecraft on display and for the receipt, storage, and cleaning of artifacts. The current staff of 31 at Silver Hill includes 15 craftsmen who will be able to restore 8 craft in FY 1974 and another 8 in FY 1975. The additional positions will allow an additional 11 air and spacecraft to be partially restored and will strengthen other collections management efforts.

Presentations and Education Division - The new building will have a spacearium/planetarium and an auditorium with wide-screen presentations. A writer-producer and planetarium technician ($27,000) are requested to assist the present staff of 6 in the preparation of planetarium shows. Funds also are requested for the purchase of special astronomical projection devices ($68,000). When fully operational, four or five different shows will be presented each year. The working titles for some of these showings are: "Cosmic Journey," "Starship Earth," "Stardust," "Empire of the Stars," and "Man Beholds the Heavens."

Exhibits Production - All 25 exhibition halls will have objects on display when the Museum opens to the public. An essential goal for the opening date, however, is to have at least half of the halls well equipped with permanent exhibitions which are worthy of the new structure and deserving of public interest. The balance of the halls will be completed as quickly as possible after the opening date. In order to help achieve these goals, exhibits personnel and other resources have been transferred to NASM from the Office of Exhibits Programs (now Office of Exhibits

Central). This reorganization will result in more effective application of existing resources. About 40 exhibits specialists are now available to NASM, but the need is much greater than can be met by this staff.

Currently only three of the components for the opening exhibition have been completed and tested in the Arts and Industries Building. Two more exhibitions will be tested in FY 1974 and another four in FY 1975. In total, less than three years remain for the development of the exhibits that will be offered to the anticipated seven million visitors expected during the first year. Space rental will be required for the completed exhibits being prepared prior to the building's completion. Rental funds for this space are in the Uncontrollable Section of the budget.

Seven additional exhibits personnel ($86,000) (two designers, an audio-visual writer and a technician, two carpenters, and a laborer) and support funds ($879,000) are requested. The support funds are for other services, supplies and materials, and equipment.

Administration - An additional clerk-typist ($9,000) is required to assist with the increase in clerical tasks in the museum.

Printing and Reproduction - Seven exhibit catalogues are being planned as educational adjuncts to new halls. In addition, a new series "Smithsonian Studies in Air and Space" is being planned. The first two volumes of this series are expected to be ready for publication by FY 1975. Funds of $10,000 are requested to help finance printing costs. The balance of costs will be financed by resources in the Press currently available for Printing.

The following list shows the 25 halls that are expected to be in the completed building. Titles are tentative but indicate the theme of the exhibit.

National Air and Space Museum
Major Exhibition Halls

Vertical Flight and Rotary Wing Flight
Air Transportation
Earliest Birds
Kitty Hawk Flyer
Index Exhibit
Large Space Vehicles
History and Technology of Spaceflight
General Aviation
Exhibition Flight
Air Traffic Control and Navigation
Earth Flight Environment
Trophy Hall
Space Flight Environment
Life in the Universe
Satellites and Space Probes
Earthbound Benefits From Flight
Sea-Air Operations
Understanding Air and Space
Technology and Materials
World War II Aviation
Lighter Than Air
World War I Aviation
Significant Aircraft and Spacecraft
The X Airplanes
Flight to the Moon
Air and Space in the Arts

CENTER FOR THE STUDY OF MAN

1973 Actual.....$271,000
1974 Estimate.....$296,000
1975 Estimate.....$304,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	14	0	14
11 Personnel Compensation.....	230	7	237
12 Personnel Benefits.....	19	1	20
21 Travel & Trans. of Persons..	12		12
23 Rent, Comm. & Utilities.....	3		3
24 Printing and Reproduction...	1		1
25 Other Services.....	25		25
26 Supplies and Materials.....	1		1
31 Equipment.....	5		5
TOTAL	296	8	304
Analysis of Increase			
Necessary Pay.....		8	
Program Funds.....		0	

ABSTRACT - The Center for the Study of Man (CSM) has several anthropological programs: development of the Encyclopedia of North American Indians; sponsorship of an urgent anthropology program; coordination of international anthropological efforts on current social problems; and conduct of an immigration and ethnic studies program. No program funding increase is sought for FY 1975; an amount of $8,000 is needed for necessary pay.

PROGRAM - The Center for the Study of Man coordinates research and development on a series of important anthropological programs. The American Indian Program is presently concerned primarily with the development of the 20 volume Encyclopedia of North American Indians to be published for the Bicentennial. It will contain 1,000 articles. This is the major effort of the staff and other resources of the Center. Forty percent of the manuscripts are now complete and the development of design and specifications for printing is well along. Funds for the actual printing of the Encyclopedia are contained in the Bicentennial budget request.

Another aspect of the American Indian Program is the development of a system for providing scholarly educational materials concerning Indians to individuals, schools, and Indian communities. In addition, the Center helps to coordinate educational intercommunication among Indians themselves, with scholars, and with appropriate government and private agencies.

As work on the Encyclopedia progresses, it becomes increasingly clear that there are dangerous gaps in the knowledge of North American Indian cultures. In particular, there is a pressing need to interview within the next few years the tribal elders who are anxious to fill in the record of their proud past. The Urgent Anthropology Program which identifies, publicizes, and finances, by means of small awards, needed research in geographical areas that are undergoing rapid environmental change as a result of urbanization, improved communications, better transportation, and other factors has been helpful in this respect. Its objective is to salvage and preserve information in selected rapidly changing areas before time and events erase our ability to understand the cultures that existed.

The Cross-Cultural Research Program is coordinating the efforts of numerous anthropologists and other human scientists in developing new, comparative information on population, environmental, and educational studies. Comparative research on world use of cannabis and alcohol has also been carried out.

The comparative Immigrant and Ethnic Studies Program, initially funded through temporary grant funds, is carrying out basic research in the United States, Canada, the circum-Caribbean area, and the Panama Canal Zone. It investigates the special conditions which stimulate immigration, assesses the contributions made by immigrants, and studies the effects of immigration on the source country and on the target country. Field research, archival research, and statistical methods are all used.

In response to requests from a number of Federal agencies (National Science Foundation, National Endowment for Humanities, National Institutes of Health, etc.) and from other concerned organizations and individuals, the Center is establishing a National Ethnographic Film Center and Archive. The purpose of this unit will be to record, collect, and preserve the cultures of North American Indians and other peoples as recorded on film. Much of the film which will be collected is in great danger of destruction and the need for immediate action is clear. Initial funding for this program will be from outside sources.

NATIONAL ZOOLOGICAL PARK

1973 Actual.....$4,074,000
1974 Estimate.....$4,654,000
1975 Estimate.....$5,115,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	286	20	306
11 Personnel Compensation.....	3,239	320	3,559
12 Personnel Benefits.....	315	28	343
21 Travel & Trans. of Persons..	22		22
22 Transportation of Things....	5		5
23 Rent, Comm. & Utilities.....	145	20	165
24 Printing and Reproduction...	10		10
25 Other Services.....	260	23	283
26 Supplies and Materials.....	471	49	520
31 Equipment.....	186	21	207
41 Grants.....	1		1
TOTAL	4,654	461	5,115
Analysis of Increase			
Necessary Pay.....		186	
Support Funds.....		275	

ABSTRACT - The National Zoological Park (NZP), located on 156 acres in Rock Creek Valley, exhibits a large and varied animal collection, serves the information and education needs of the public, and promotes scientific research on animal health and conservation. Budgetary requirements for FY 1975 include an additional 20 positions and $275,000 to serve the following support functions: (1) Buildings and Facilities Management - a planner/estimator, six general maintenance helpers, and 11 custodial supervisors and workers ($142,000) and maintenance funds ($108,000); and (2) Protection - one paramedic and one policeman ($20,000) and health and safety materials and equipment ($5,000). A further amount of $186,000 is needed for necessary pay for present staff.

PROGRAM - The National Zoological Park was established in 1889 for the "advancement of science and the instruction and recreation of the people." To accomplish this mission, the Zoo exhibits a broad variety of animals representing one of the most important collections of exotic animals in existence, maintains information and education programs for the visiting public from all over the United States, and promotes scientific research, including biomedical programs, for increased scientific knowledge and for the health of the animals. Visitors increased in number from 4,996,207 in 1971 to 5,953,748 in 1973 and will surge forward again as they celebrate the births of rare and fascinating animals and move toward celebrating the birth of the nation.

Resource planning for the National Zoological Park is dominated by one need--support growth must accelerate to catch up and keep pace with the Zoo's expanding responsibilities to the animals it hosts and to the growing public it serves.

In earlier years a typical zoo put an animal in a bare cell, fed it, and when it died (as often happened), replenished it from the wild. Now a responsible zoo must seek to employ the animal as an educational resource, provide for its psychological and physiological needs, protect its gene pool through selective breeding programs as its number and its wilds vanish, sustain it in good health for a full and useful life demonstrating to man the character and worth of its own kind. The National Zoo must lead in this mission.

Such improved quality of care and education demands parallel efforts--thoughtful execution of the approved Master Plan (described elsewhere in this budget) so that the National Zoo can perform its responsibilities for modern animal and public accommodation, as it maintains its leadership in animal care and research; and successful care and operation of its current active and heavily visited facilities. This effort requires continued teamwork within the Zoo in applying new knowledge from a number of fronts, creative and responsible animal management, successful educational approaches, balanced growth and training of staff and volunteers, facilities management know-how, new and effective nutrition programs, responsive animal health and pathology, refined reproductive strategies, research on-site and in the field, and space to accomplish the above. For the National Zoo all these critical capabilities are at hand, but for their effective application, funding gaps must be closed. Simple but harsh shortages in labor, though good manpower is readily available, and escalation in material costs are the two critical problems that this request addresses. Without meeting these needs the Zoo can only lose critical ground and, despite it capabilities, fall backward in serving the public and its responsibilities.

JUSTIFICATION OF $275,000 INCREASE:

Buildings and Facilities Management - The request for 11 additional custodial, supervisory, and worker positions ($79,000) is 2/3 of the minimum essential to sustain a park-wide public space cleaning program. The Zoo now has only 25 such positions for all public and work spaces in buildings and on the grounds. It must not compromise on the cleanliness of public space. Currently animal keepers and other professionals, whose time and energies the animal programs increasingly demand, must leave their primary assignments to sweep and scrub public space. This is totally unacceptable for any responsible public program let alone the Nation's Zoo.

The trade and crafts personnel of the Zoo tend its utilities, keep systems critical to animal health and public safety in repair, and perform service in a dozen varied areas of expertise including pipefitting, masonry, metalworking, boiler plant operations, welding, painting, carpentry, electrical work, refrigeration repair, and asphalt repair. The total staff of 60, including supervisory and clerical personnel, is seriously undermanned. Six general maintenance helpers (only one now is on staff) will help close the gap while receiving on-the-job training as a valuable method of providing and sustaining upward mobility--a practical solution, as well as an ethical one, since so many of these skills are unavailable on the labor market ($50,000).

The requested planner/estimator ($13,000) is an integral component needed to permit craftsmen-supervisors and work leaders to economize in manpower and material planning to accomplish the thousand-plus repair and improvement tasks faced yearly. The job should pay for itself in increased efficiency.

Protection - In normal circumstances a Zoo is a place demanding special concern for health and safety and capability to cope with emergencies. The volume of visitors using the National Zoo and the increase and complexity of staff operations and construction programs have outstripped present health services. A suitable first-aid area is now being readied. First-aid training of staff must be stepped up and kept current throughout the Park. First-aid kit centers must be monitored and improved. As construction programs increase in and around a heavily visited Zoo every precaution will be taken to assure safe separation of the public from building and construction staging, and for protection of Zoo staff and volunteers. But one emergency untended wipes out the best of future intentions. NZP Protective Services' health, safety, and monitoring capabilities must be strengthened with a trained paramedic and one more policeman (30 positions are now authorized). The additional cost will be $20,000.

Miscellaneous Support - Non-personnel increases included in this request total $113,000, constituting only a 10 percent spending increase in essential programs -- about that consumed by inflation. Animals must eat. Their manure must be hauled away. Shelters must be heated. Four-fifths of all the Zoo's other object class spending is fixed--the balance serves quality of public service and mission performance. With the increase requested all purchase programs must be maintained at the bare essential level in order to meet responsibilities.

SMITHSONIAN SCIENCE INFORMATION EXCHANGE

1973 Actual.....$1,600,000
1974 Estimate.....$1,695,000
1975 Estimate.....$1,770,000

(Dollars in thousands)	Base FY 1974	Requested	Est. FY 1975
41 Grants.....	1,695	75	1,770
TOTAL	1,695	75	1,770
Analysis of Increase			
Necessary Pay.....		75	
Program Funds.....		0	

ABSTRACT - The Smithsonian Science Information Exchange (SSIE) serves as a national registry of research in progress covering all areas of basic and applied research supported by Federal or private organizations. Some 180,000 ongoing research projects are on file. The purpose of the Exchange is to help research managers and scientists learn of current research, avoid unnecessary duplication of work, and plan for new research programs. The SSIE is funded by a Federal contract with the Smithsonian and income from its users. For FY 1975 the Smithsonian is requesting an additional $75,000 to permit the Exchange to meet comparability pay increases for its employees. No other increase to its appropriated funds is sought.

PROGRAM - The SSIE operates as the largest and most modern information system of its kind in the world. The Exchange is designed to collect, index, store, and retrieve information about ongoing research. The SSIE data base covers all areas of basic and applied research in the life, physical, behavioral, and engineering sciences conducted under the support of Federal as well as non-Federal organizations. Each year new information on about 100,000 ongoing research projects is incorporated into its computer data bank. Total data bank size averages 180,000 projects. Since 1950 the Exchange has provided services designed to help research program managers, admin-

istrators, and individual scientists avoid unwarranted duplication of research efforts, evaluate existing research efforts, and plan for new research programs. A number of similar systems have been developed in other countries, many of which have been patterned after the Exchange, but SSIE continues to maintain a technological advantage and serves as an example of what can be accomplished through steady improvements of its systems and customer services.

The Exchange not only provides information directly to users, but furnishes data to a number of specialized information centers as well. These centers provide information in a wide range of subject areas and cover both ongoing and completed research. They thus reach an even wider total audience than does the Exchange through its direct user service program. In addition, information contained in the Exchange's data base is used to prepare catalogues of ongoing work in specific areas such as Water Resources Research, Health Services Research, Aquatic Pest Control and Pesticide Residues in Aquatic Environment, and Dental Research. These catalogues are published by Federal agencies in increasing numbers and areas of interest. They make information available to large numbers of users on a significantly broader scale than is possible in response to individual information requests made to the Exchange. In FY 1974, the Exchange will provide more than a half million summaries of research in progress in response to requests, not including the information available to users from catalogues and the specialized information centers.

Among SSIE's unique features is its ability to provide prompt response to both broad and specific requests for information on a multidisciplinary basis, regardless of the source of support. The Exchange achieves uniformity of indexing by means of well trained scientific staff and a well developed data processing system which utilizes the latest available computer equipment and technology.

The Exchange has made considerable progress in several areas which ultimately benefit its users. The most significant efforts have been those designed to improve the completeness and timeliness of information flowing into the data base. New techniques, such as computer assisted indexing, are being developed to reduce the time required for processing information into the system and allow more work to be accomplished at a faster rate without significant increases in personnel strength.

The present budget request of $1,770,000 reflects a request for a $75,000 increase over the FY 1974 estimate. These funds are intended to offset comparability salary increases and other personnel costs and benefits resulting primarily from the January and October 1973 pay raises. They do not represent an increase in cost for additional personnel or other increased operating expenses. These latter costs are expected to be met by increases in user revenues. Continuing their steady growth since charges for services were initiated in FY 1969, user revenue is estimated to be $575,000 in FY 1975 as compared with a projected $500,000 in FY 1974 and $430,000 in FY 1973. Details of FY 1974 and FY 1975 budget are shown below.

Although it has not been possible within the funds available to mount a major campaign to increase use of the Exchange, efforts have continued to result in a steady growth of both users and user income. The need for and value of SSIE information to the scientific community of research investigators and administrators becomes increasingly clear as the Exchange continues to meet its role as the nation's primary source of information about ongoing research. By expanding its coverage and the range of services it offers, SSIE provides an important service for better management of research funds.

($1,000s)

SMITHSONIAN SCIENCE INFORMATION EXCHANGE, INC.
ESTIMATED BUDGETS FY 1974 - FY 1975

	FY 1974			FY 1975		
	Total	Federal Support	User Revenue	Total	Federal Support	User Revenue
Personnel						
Salaries	$1,380	$1,085	$295	$1,455	$1,140	$315
Benefits	191	150	41	217	170	47
Contract Services						
Travel	13	6	7	12	6	6
Transportation of Things	2	2		2	2	
Rents						
Telephone	9	8	1	10	8	2
Computer	242	204	38	271	204	67
Photocopying	10	8	2	10	8	2
Building	103	81	22	105	81	24
Other	16	5	11	10	5	5
Printing	35	3	32	35	3	32
Other Services						
Equipment Maintenance	4	4		5	4	1
Other	32	18	14	41	18	23
Supplies	32	21	11	31	14	17
Equipment	1		1	11	7	4
TOTAL	2,070	1,595	475	2,215	1,670	545
SI Service	125	100	25	130	100	30
GRAND TOTAL	2,195	1,695	500	2,345	1,770	575

OFFICE OF THE ASSISTANT SECRETARY FOR HISTORY AND ART

1973 Actual..... $242,000
1974 Estimate..... $206,000
1975 Estimate..... $263,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions	11	2	13
11 Personnel Compensation	182	42	224
12 Personnel Benefits	15	4	19
21 Travel & Trans. of Persons	4	1	5
23 Rent, Comm. & Utilities	1	1	2
24 Printing and Reproduction	1	1	2
25 Other Services	1	7	8
26 Supplies and Materials	2	1	3
TOTAL	206	57	263
Analysis of Increase			
Necessary Pay		7	
Support Funds		50	

ABSTRACT - The Office of the Assistant Secretary for History and Art advises and assists the Secretary in planning, implementing, and reviewing the progress of Smithsonian history and art programs. In addition, this office oversees the planning

and coordination of the Smithsonian's Bicentennial programs and projects. Included under this heading are the American Studies program and the Joseph Henry Papers project.

An increase of 2 positions and funding of $50,000 is requested to meet the following support requirements: (1) General Administration - a program assistant and $40,000 to help meet the rising central administrative workload and (2) Printing and Reproduction - an editorial assistant and $10,000 to transcribe and sort original source materials in preparation for publication of forthcoming volumes of The Papers of Joseph Henry. An additional amount of $7,000 is being sought for necessary pay.

PROGRAM - The Office of the Assistant Secretary for History and Art advises and assists the Secretary in planning, implementing, coordinating, and reviewing progress of the programs of Smithsonian history and art bureaus and offices. In addition, this office oversees the planning and coordination of the Smithsonian's Bicentennial programs and projects. The bureaus and offices reporting directly to the Assistant Secretary for History and Art are the Archives of American Art, Cooper-Hewitt Museum of Decorative Arts and Design, Freer Gallery of Art, Hirshhorn Museum and Sculpture Garden, National Armed Forces Museum Advisory Board, National Collection of Fine Arts, National Museum of History and Technology, National Portrait Gallery, Office of Academic Studies, Office of American Studies, Office of Seminars, the Joseph Henry Papers, and Hillwood.

Included in the funding identified for this office are the American Studies program and the Joseph Henry Papers project. The Office of American Studies organizes and conducts a formal program of graduate education in the material aspects of American civilization, and participates in the overall program of historical, archaeological, and architectural history research at St. Mary's City, Maryland, as funded by the state of Maryland, National Endowment for the Humanities, Rockefeller Foundation, and other foundations. The Editor of the Joseph Henry Papers and his staff have been gathering and preparing for publication the manuscripts of Joseph Henry (1797-1878), a pioneer American physicist and first Secretary of the Smithsonian Institution. Volume one of a multi-volume set was published in December 1972. This and subsequent volumes are to be included in the documentary publications program of the National Historical Publications Commission.

JUSTIFICATION OF $50,000 INCREASE:

General Administration - The workload of the Office of the Assistant Secretary for History and Art (currently consisting of 4 employees) is increasing significantly as the development of Smithsonian Bicentennial programs and projects accelerates toward 1976. In addition, a major new museum on the Mall, the Hirshhorn Museum and Sculpture Garden, will open in early FY 1975; and Hillwood, the late Marjorie Merriweather Post's estate, will be readied for opening to the public as a new Smithsonian museum. These developments, on top of the year-to-year growth in programs of research, exhibition, publication, and public education in history and art bureaus and offices, require an increased administrative oversight capability in the Office of the Assistant Secretary. Funds for a program assistant and support costs ($40,000) are requested to provide this capability.

Printing and Reproduction - Publication of the first volume of The Papers of Joseph Henry was the culmination of five years of preparatory work in searching out original source material; organizing, transcribing, and editing those materials; placing them in their appropriate historical context; and interpreting them from the perspective afforded by current-day knowledge of the history of American science and technology. The original source materials already uncovered provide much of the documentation necessary for subsequent volumes in the series. A staff assistant ($10,000) to transcribe and sort these materials would be an invaluable aid to the historian and his research assistant and would help assure timely publication of forthcoming volumes.

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NATIONAL MUSEUM OF HISTORY AND TECHNOLOGY

1973 Actual.....$2,787,000
1974 Estimate.....$3,854,000
1975 Estimate.....$4,093,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	197	0	197
11 Personnel Compensation.....	2,982	109	3,091
12 Personnel Benefits.....	253	9	262
21 Travel & Trans. of Persons..	43		43
23 Rent, Comm. & Utilities.....	15		15
24 Printing and Reproduction...	8	41	49
25 Other Services.....	283	55	338
26 Supplies and Materials.....	75	20	95
31 Equipment.....	195	5	200
TOTAL	3,854	239	4,093
Analysis of Increase			
Necessary Pay.....		118	
Support Funds.....		121	

ABSTRACT - The National Museum of History and Technology is the repository of the national collections documenting the historical and technological achievements of the American people. In FY 1975 an increase of $121,000 is requested to meet the following support requirements: (1) Registration - $30,000 to fund contracts for records management specialists for the development of a uniform, coordinated record-keeping system and $5,000 for photographic support for identification and documentation purposes; (2) Conservation - $10,000 to initate restoration and conservation of the Warshaw Collection of Business Americana; (3) Printing and Reproduction - $36,000 to cover rising printing costs; and (4) Buildings and Facilities Management - $40,000 to contract for the refurbishing of exhibit halls. An increase of $118,000 for necessary pay is also requested.

PROGRAM - The National Museum of History and Technology (NMHT) occupies a unique position among the great museums of the world. As the repository of the national collections documenting the historical and technological achievements of the American people, the Museum has responsibility for over 16,000,000 objects related to all facets of the American experience. Each of these objects must receive the highest level of professional care and preservation and must be stored and exhibited using the best techniques available.

Since opening in 1964, the NMHT has provided a variety and richness of public exhibits seen by over 54,000,000 visitors. The Museum annually receives more visitors than any other museum in the world. As the most visited museum in the world, it will be host to almost 7,000,000 visitors during FY 1974. It is anticipated that this annual attendance figure will total more than 15,000,000 by the Bicentennial year, 1976, and continue for several years thereafter.

As a center for the scholarly study of the history of American civilization and the history of science and technology, this Museum continues to support and encourage basic research and publication in many subject fields, ranging from early exploration to studies of contemporary American culture.

In FY 1974, exhibit installation has been completed in the third floor exhibit area representing important aspects of American technology; i.e., the Hall of Printing

and Graphic Arts, the Hall of Photography, the Hall of Stamps and Mail, the Hall of News Reporting, and the Hall of Money and Medals. The major portion of exhibit resources in FY 1974 is being directed towards "Suiting Everyone," an exhibit on the development of ready-to-wear clothing in the United States from the 18th century to the present, and "Of the People," an exhibition focusing on the unique and distinctive political process in the United States, relating how the American people have formed and influenced their government and been affected by their government.

JUSTIFICATION OF $121,000 INCREASE:

Registration - The national historical collections now contain more than 16,000,000 items many of which are not yet adequately preserved, stored, recorded, and catalogued. The size and variety of the collections, and their disparate origins from within and without the Institution have resulted in the existence of more than 20 variously incompatible record-keeping systems in this museum. With funds provided in FY 1974 the collections management registrarial program has proceeded rapidly with the appointment of a core administrative staff to study and develop collections management procedures and recommend more efficient programs for the future. Under the direction of this staff, curators and support personnel in all divisions are reviewing and revising their procedures to obtain greater conformity and security. In FY 1975, $30,000 is requested to fund contracts with records management specialists thus permitting the initial implementation of a Museum-wide modern records management and inventory system. In addition $5,000 is requested for photographic support required for purposes of documentation and identification.

Conservation - The Warshaw Collection of Business Americana, a unique collection of 1 million advertisements, lithographs, photographs, and other memorabilia relating to almost every aspect of American civilization from the early 1800's to 1950, is in constant use for research and the preparation of exhibits. As the collection is composed entirely of paper material, restoration and conservation is required to forestall irreparable damage. An amount of $10,000 for outside contracts is required to initiate this project which will continue over the next five to ten years.

Printing and Reproduction - No comprehensive catalogue exists for current special exhibits or for any of 40 major exhibit halls. Such catalogues would add greatly to visitors' comprehension and enjoyment; however, the high costs of printing ($32,000 for the catalogue planned for the "Suiting Everyone" exhibit) generally precludes their publication. A current and continuing need exists for funds ($36,000) to publish manuscripts for exhibit catalogues, books, and numerous lesser publications prepared each year by the NMHT staff of curators and historians, and to meet rising printing costs.

Buildings and Facilities Management - Existing exhibit areas, which have accommodated an extraordinary number of visitors since 1964, are becoming worn and dirty; and many exhibits are in need of refurbishment. Exhibits personnel, however, are totally involved in an unprecedented volume of exhibit production and installation; and building maintenance personnel are not trained or equipped to handle valuable and fragileitems from the collections. An amount of $40,000 is requested to contract with experts for the refurbishing of existing exhibits in order to provide clean, attractive surroundings for the collections and visitors.

NATIONAL COLLECTION OF FINE ARTS

1973 Actual.....$1,368,000
1974 Estimate.....$1,607,000
1975 Estimate.....$1,714,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	79	3	82
11 Personnel Compensation.....	1028	84	1112
12 Personnel Benefits.....	87	7	94
21 Travel & Trans. of Persons..	24		24
22 Transportation of Things....	45		45
23 Rent, Comm. & Utilities.....	10		10
24 Printing and Reproduction...	15	7	22
25 Other Services.....	252		252
26 Supplies and Materials.....	50	9	59
31 Equipment.....	80		80
41 Grants.....	16		16
TOTAL	1607	107	1714
Analysis Of Increase			
Necessary Pay.....		44	
Support Funds.....		63	

ABSTRACT - The National Collection of Fine Arts (NCFA), the oldest national collection of art, is devoted to the conservation, study, and presentation of American painting, sculpture, prints and drawings, and, in the Renwick Gallery, American design and crafts. In FY 1975 an increase of 3 positions and funding of $63,000 is requested to meet the following support requirements: (1) Conservation - an additional conservator ($18,000), specializing in works on paper, and supporting funds of $9,000 for laboratory equipment and supplies; (2) Registration - an additional person to serve as assistant to the registrar for the effective control of expanding collections ($10,000); (3) Archives - an archivist ($12,000) to handle the photographic reference files, shortly to be increased by over 400,000 negatives of works of American art, and an additional $7,000 for equipment and supplies; and (4) Printing and Reproduction - $7,000 to meet the cost of increased publication activity. An amount of $44,000 is also requested for necessary pay.

PROGRAM - This major collection of American art, the origins of which go back to the 1830's, was uncatalogued and ill-housed until the present facility was opened in the former Patent Office in 1968. The collection of some 15,000 works has now been registered on computer and arranged, either in carefully planned galleries or in systematic storage, so that every work is available for public pleasure or scholarly study. About 1,700 works are on loan to public offices in the Washington area. Exhibitions are presented in the United States and abroad, and an active program of education is maintained for the schools and the general public.

In FY 1974, twenty-three exhibitions were organized and presented, including "Paintings from the Pacific Northwest," "Shaker" (at the Renwick Gallery), the 23rd National Exhibition of Prints (in conjunction with the Library of Congress), and the "Paintings of Robert Loftin Newman." Exhibitions were accompanied by authoritative publications prepared by the museum. Some nineteen separate publications were

issued. The important Lincoln Gallery was restored and totally reinstalled to present a wide range of aspects of American art from the eighteenth century to the present. New galleries devoted to European paintings and sculpture, and portrait miniatures were opened. "Explore," a special children's gallery, was newly installed. NCFA's Office of Exhibitions Abroad arranged for exhibitions to travel to Europe and South America. The very active education program was expanded to offer further activities for school children and the public. (Some 15,000 public school children attended sessions within the museum, and many others were reached in the schools themselves.) Thirty-six museum interns were introduced to museum practices through on-the-job training. The research program included nine doctoral students completing studies of American art.

JUSTIFICATION OF $63,000 INCREASE:

Conservation - Although this large collection has now been properly catalogued and made available to the public and scholars, the effect of many years of neglect has not yet been entirely compensated for. A major part of the collection is in need of restoration or special care. With only two conservators,NCFA's progress in arresting the deterioration of paintings, sculpture, and graphic works and returning them to a proper condition for display has been slower than either proper use of the collection or the safety of the works requires. In order that this essential task can be accomplished more effectively, an additional conservator, specializing in works on paper ($18,000) and supporting funds of $9,000 for laboratory equipment and supplies are requested.

Registration - In order to assure the proper use of the collection and to accommodate the additional activity of the Renwick Gallery, it has been necessary to reorganize the entire registrarial operation over the last two years. The registrar is responsible for all works of art in the museum, both borrowed and permanent, for their registration, storage, shipping, photographing,and accessibility to public and scholars. Each year, in addition to the daily work of maintaining the collection, an average of 1,000 works are accessioned, computer files are maintained, 4,500 transactions of lending, borrowing,and shipping of works are completed, some 12,000 photographs are made and supplied to requesters--all by a staff of only nine persons. For the effective operation of this expanded activity an additional person to serve as assistant to the registrar is needed ($10,000).

Archives - The NCFA has become a major reference center for information about American art, yet much material on hand has not yet been organized to allow its maximum use by the public. Most critical are the rapidly growing photographic reference files, now numbering over 75,000 and shortly to be increased by over 400,000 photographic negatives of works of American art from the Juley collection. A knowledgeable archivist ($12,000) is badly needed to make this material available, and $7,000 additional for equipment and supplies.

Printing and Reproduction - In the expansion of its educational activity in American art, the range and nature of the NCFA's publications has changed. The eight major and many smaller publications planned for FY 1974, which range from the first full study of the painter Robert Loftin Newman to a presentation of Shaker furniture, extend a bridge between the most advanced research in American art and a broad public. Much material on American art and artists is being made available to the public for the first time through this program. All exhibitions and many permanent galleries are supplemented with published information that serves to make the material more accessible to the public. If this program is to continue at its present level and expand to those galleries not yet covered, $7,000 of additional funds to meet rapidly rising printing costs are required.

NATIONAL PORTRAIT GALLERY

1973 Actual.....$1,031,000
1974 Estimate.....$1,144,000
1975 Estimate.....$1,260,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	44	6	50
11 Personnel Compensation.....	706	89	795
12 Personnel Benefits.....	61	7	68
21 Travel & Trans. of Persons..	20		20
22 Transportation of Things....	11		11
23 Rent, Comm. & Utilities.....	8		8
24 Printing and Reproduction...	5	7	12
25 Other Services.....	51	6	57
26 Supplies and Materials.....	30	7	37
31 Equipment.....	244		244
41 Grants.....	8		8
TOTAL	1,144	116	1,260
Analysis of Increase			
Necessary Pay.....		26	
Support Funds.....		90	

ABSTRACT - The National Portrait Gallery (NPG) is the only national museum of American history that tells the history of the United States primarily in terms of the men and women who made that history. In FY 1975 an increase of 6 positions and funding of $90,000 are requested to meet the following support requirements: (1) Conservation - a painting conservator ($13,000) to eliminate the backlog in painting restorations and $8,000 to permit contracting for specialists in paper and sculpture conservation and for the purchase of necessary supplies and materials for conservation and frame restoration; (2) General Administration - a deputy administrative officer ($16,000) to assist with personnel administration, monitoring of contracts, and to serve as a liaison with other offices and bureaus in the Institution and $3,000 for the purchase of office supplies and furnishings and the costs of office machines; (3) Public Orientation and Education - a clerk typist ($8,000) to assist with mailings, files and planning for lectures, films, and other special events and $14,000 to permit the hiring of part-time information desk receptionists and the publication of building leaflets and educational materials on special exhibits for free distribution; (4) Library - a library technician and a clerk typist ($18,000) to eliminate cataloguing backlogs and to assist in processing book orders; and (5) Photography - a lab technician ($8,000) to enable the photographer to meet the higher volume of work orders occasioned by an expanding exhibit schedule and $2,000 for film and photographic supplies. An increase of $26,000 in necessary pay is also requested.

PROGRAM - The National Portrait Gallery is the only national museum of American history that tells the history of the United States primarily in terms of the men and women who made that history. The portraits of these men and women are crucial documents of historical evidence and bear strong witness to the roles these people have played in the American experience.

The Gallery's activities include: (1) the expansion and care of its collections; (2) public education through the exhibition of the permanent collection and specially organized temporary exhibitions; (3) the preparation and national distribution of

scholarly and popular publications related to these exhibitions; and (4) the compilation of a definitive catalogue of American portraits, constituting a unique information resource in the areas of American history and biography, art, and iconography.

Nearly 100 portraits were added to the permanent collection in FY 1973 and 1974, more than half of them by gift. Among the most important were a miniature of John Paul Jones by the Comtesse Turpin de Crissé, one of five known plaster casts of the bust of Thomas Jefferson done by Pietro Cardelli when the former President was 76 in 1819, a terra-cotta bust of General Winfield Scott by William Rush, and the only known life portraits of writer F. Scott Fitzgerald and composer Charles Ives.

The Black Presence in the Era of the American Revolution, 1770-1800, an exhibition which included more than 250 paintings, prints, broadsides, documents, letters, and other objects, drew an attendance of more than 160,000 which was larger than that for any exhibition previously held at the Gallery. A catalogue was published in book form by the New York Graphic Society in association with the Smithsonian Institution Press. A 72-page educational booklet and a teaching guide also were produced. A small show marking the sesquicentennial of the Monroe Doctrine opened on the anniversary of that event, December 2, 1973. Scheduled for a period of six weeks beginning in February 1974 is an exhibition of self-portraits by American artists containing 109 works ranging in date from the late seventeenth century to the present time. Catalogues accompany both of these exhibitions.

The Gallery's first major bicentennial exhibition In the Minds and Hearts of the People: Prologue to Revolution, 1760-1774 will open on June 14, 1974. A full-scale catalogue of the exhibition is being published by the New York Graphic Society, and related educational materials also will be produced.

JUSTIFICATION OF $90,000 INCREASE:

Conservation - Because the Gallery's permanent collection is still weak in a number of significant areas, it is extremely important that every portrait acquired be placed on public view as quickly as possible. Unfortunately, more than half of the paintings which are added to the collection need restoration--sometimes quite extensive in nature--before they can be exhibited. In FY 1973 and 1974, for example, the NPG conservator completed 125 requests for the routine examination and minor restoration of paintings, in addition to the relining and total restoration of 13 paintings, each requiring a minium of one week's work. Presently fifteen paintings await restoration, including portraits of Robert Morris, a signer of the Declaration of Independence; President William Howard Taft; and a large Benjamin West portrait of signer Henry Middleton and his family, which alone will require an estimated twenty weeks to restore. To eliminate an existing backlog and to conserve the permanent collection and attend to new acquisitions, the Gallery urgently needs an additional painting conservator ($13,000). Funds are also requested ($8,000) to contract for paper and sculpture conservation (areas requiring the skills of specialists but where present requirements do not justify hiring full-time staff) and to purchase relining materials and chemicals required for the conservation of paintings and supplies for frame restoration. The frames of over 30 paintings now on view need restoration which could be provided by a staff member now being trained in the National Collection of Fine Arts' frame shop.

General Administration - The director and administrative officer comprise the same level of administrative staff extant at the inception of the Gallery five years ago. A deputy administrative officer is needed to assist in the increasingly complex operation of the Gallery ($16,000). Support funds ($3,000) are needed for the purchase of office supplies and furnishings and for office machines (typewriters, copiers, etc.).

Public Orientation and Education - Wider public recognition of the NPG's programs will attract more visitors and enhance the Gallery's ability to elicit

gifts from prospective donors, many of whom in the past, ignorant of the Gallery's existence, have let portraits of important national figures reach the highly inflated commercial market. A clerk typist ($8,000) is required to support the Gallery's public affairs officer by assisting with mailings, files, and planning for lectures, films, and other special events which will take place in the historic "Model Hall" of the Gallery being restored in FY 1974. So that the guard force can devote its undivided attention to security responsibilities, which will become more demanding as attendance (up 47 percent in the first half of FY 1974) increases, the Gallery needs to hire part-time information desk receptionists to work weekends, dispense literature and self-guiding tour materials, and monitor audio-visual mechanisms ($7,000). In addition, funds are required for orientation leaflets and educational materials for free distribution in connection with the Gallery's special exhibitions ($7,000).

Library - The library staff is overburdened by routine tasks of cataloguing new titles and responding to staff and public requests for library services. In FY 1973, 1,400 titles were catalogued, but 2,700 remain in a backlog which has accumulated over the past five years. A library technician ($10,000) is needed to reduce this backlog, as well as to assist in processing orders (a need estimated at two days per week above the present capability). In addition, a clerk typist ($8,000) is required to assist the librarian with administrative and clerical tasks which now take the time of professional and technical library staff. There is no present clerical support in the library which serves both the National Portrait Gallery and the National Collection of Fine Arts.

Photography - In FY 1973 the Gallery's photographer responded to over 350 work orders which required 1,640 black and white photographs, 8,400 prints, 4,500 35mm slides, and 970 color reproductions and negatives. The demand for photo services in connection with research, documentation, exhibits production, and public education will increase in FY 1975 with the expansion of the NPG exhibit schedule following the renovation this spring of the "Model Hall" and other areas. A lab technician ($8,000) will assist the photographer to meet the higher volume of orders and enable him to direct the production of educational film strips, slide sets, video tapes, etc. increasingly needed by the Gallery. An additional $2,000 is requested for film and photographic supplies increasingly used to document the collections, provide reproductions ordered by the public, and for photographic enlargements needed in connection with the installation of exhibitions.

HIRSHHORN MUSEUM AND SCULPTURE GARDEN

1973 Actual.....$1,140,000
1974 Estimate.....$1,301,000
1975 Estimate.....$1,275,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	37	15	52
11 Personnel Compensation.....	470	235	705
12 Personnel Benefits.....	40	20	60
21 Travel & Trans. of Persons..	15		15
22 Transportation of Things....	11	-6	5
23 Rent, Comm. & Utilities.....	24	-12	12
24 Printing and Reproduction...	5	38	43
25 Other Services.....	110	280	390
26 Supplies and Materials.....	21	5	26
31 Equipment.....	600	-586	14
41 Grants.....	5		5
TOTAL	1,301	-26	1,275
Analysis of Increase			
Necessary Pay.....		20	
Program Funds.....		-46	

ABSTRACT - With its opening in the fall of 1974, the Hirshhorn Museum and Sculpture Garden (HMSG) must be prepared to maintain a full and balanced program of exhibitions, educational activities, research, curation, and technical support, including conservation, registration, and publication. A build-up of staff is required to meet these needs. No additional funds are requested for FY 1975. A net savings of $26,000 is projected. This estimate is based on a cost savings in the base resulting from the completion of major procurement of furnishings and equipment and the relocation in FY 1974 of personnel transferring with the collection to Washington, D. C.

PROGRAM - The HMSG will house a magnificent gift to the nation of outstanding modern paintings and sculpture. While the Hirshhorn collection will form the strong core of the Museum's holdings, a continuing program of new acquisitions by gift and purchase will be pursued. In addition, a lively program of temporary exhibitions utilizing loaned materials will enhance the breadth and depth of the Museum's offerings to the viewing public. For scholars, students, museum professionals, teachers, researchers, and art publishers, the HMSG will continue to be a major source of documentation and reference in the field of modern art.

The Act of November 7, 1966, authorized construction of the Museum and designated the Mall site. Building construction, which began in March 1970, is now substantially completed. The building was made available for occupancy by the staff in December 1973. All phases of the work are presently geared to prepare for the opening of the Museum in the fall of 1974.

In FY 1974 extensive planning is being devoted to the establishment of a full range of museum activities, including curation, conservation, registration, exhibition and loan activities. In addition, development has begun of a comprehensive education program involving an electronic tour-guide system, docent services, and the preparatio and scheduling of auditorium activities of special interest to the Washington communit

Initial work is also proceeding in the preparation of exhibit catalogues and the arrangement of study facilities for visiting scholars, research fellows, and qualified students studying specific works in the collection.

JUSTIFICATION OF 15 POSITIONS - Additional required technical and support staff include three positions for general administration, five for conservation work, two to assist in registration, two for research, one position for photography, an additional position in public orientation and education, and one exhibits technician. The redistribution of funds and the requested increase in personnel in FY 1975 will enable the Museum to strengthen its staff in support areas such as registration and conservation and to make fully operational ongoing and planned programs related to education, the research, curation, and exhibition of approximately 6,000 works of art, and the preparation of museum publications. Also funded in the FY 1975 estimate is the planning and installation of one major and one minor exhibition.

FREER GALLERY OF ART

1973 Actual..... $182,000
1974 Estimate..... $206,000
1975 Estimate..... $280,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	14	4	18
11 Personnel Compensation.....	160	56	216
12 Personnel Benefits.....	13	4	17
25 Other Services.....	15	7	22
26 Supplies and Materials.....	15		15
31 Equipment.....	3	7	10
TOTAL	206	74	280
Analysis of Increase			
Necessary Pay.....		7	
Support Funds.....		67	

ABSTRACT - The Freer Gallery of Art has a continuing program to search for works of art of the highest quality to be added to the collections, especially Far and Near Eastern art, and to display, conserve, and study these objects as keys to understanding the civilizations that produced them. In FY 1975, $67,000 and 4 positions are requested to meet the following support requirements: (1) Public Orientation and Education - an education specialist ($13,000) with proper linguistic and art history training to take charge of all educational programs; (2) Registration - an assistant registrar ($11,000) to assist in handling the current ongoing workload and to prepare and coordinate records for the central files; (3) Archives - funding of $4,000 to permit microfilming of irreplaceable documents in a state of deterioration; (4) Conservation - a conservator ($13,000) and $2,000 for equipment to continue quantitative analysis and restoration of collections on a more timely basis; (5) Library - An assistant librarian ($16,000); and (6) Photography - $8,000 for the purchase or rental of photographic equipment permitting inexpensive and prompt preparation of requested slides, photographs, and copies of documents and records. An amount of $7,000 is requested for necessary pay.

PROGRAM - The Freer Gallery of Art houses one of the world's most distinguished collections of Far and Near Eastern art. Included in the collection are over 10,000 works of art from China, Japan, Korea, India, and the Near East. The collection covers paintings, sculptures, and other objects in stone, wood, lacquer, jade, pottery,

porcelain, bronze, gold, and silver. Items not currently on exhibition and the library of 40,000 volumes are available to students and scholars and used extensively.

During the past few years cultural exchange between the United States and the countries of the Far and Near East has greatly expanded. The resumption of travel to the People's Republic of China has resulted in an extraordinary reawakening of interest in Chinese culture. There has been a corresponding increase in requests for assistance from scholars, both at home and abroad, for tour service, for lectures, and for general information. Curatorial staff members are having to devote more and more of their limited time to respond to these requests.

JUSTIFICATION OF $67,000 INCREASE:

Public Orientation and Education - Tour service is available, by appointment, at the Gallery on Monday through Friday of each week. Since tour services are requested by groups ranging from grammar school children to graduate students specializing in the Far and Near East, the staff member in charge of the tour must know precisely the level and interests of each group. Currently there is no member of the staff assigned solely to this project. The addition of an education specialist ($13,000) with proper linguistic and art history training is requested to take full charge of all education programs. This would allow further expansion of the tour program and provide for the development of a full range of educational materials for use both inside and outside the Museum.

Registration - With the continuing growth of the collection and the addition of new information relating to objects previously acquired, it is essential that the inventory of the collection be continued and be made current. In addition, a new Institution-wide registrarial system, which will provide greater accessibility of information for the staff and the public and a duplicate set of vital records, has substantially increased the registrarial workload. Records must be prepared and coordinated for the central files. The Freer Gallery has but one person in a registrarial position. To assist in meeting these current and continuing needs, an assistant registrar ($11,000) is required.

Archives - The correspondence of Charles Lang Freer records in precise detail the formation of the collection, the opinions of various scholars regarding individual objects in the collection, and provides invaluable information concerning the presentation of the collection to the nation. A considerable amount of discoloration and deterioration of the stationery makes it imperative that a microfilm copy of these irreplaceable documents be made. One-time funding of $4,000 is requested for this purpose.

Conservation - The conservation laboratory is responsible for the repair and cleaning of the objects in the collection and their preparation for exhibition, as well as the investigation of the materials from which they are made so that man may better understand the great civilizations of the past and gain insight into materials and techniques of value to our future. There has been a continuing need for an additional conservator, with the result that a backlog of work has been growing rapidly. New standards and techniques are constantly developing, the implementation of which requires that a longer period of time be spent in conserving individual objects. The conservation laboratory is continuing its inventory of the collection to ascertain its condition. Thus far, repairs have, of necessity, been made on a piece-by-piece basis as requested by curators, or as they are required for exhibition.

When studying art objects, quantitative analysis assists in determining those parts that are genuine and those that are spurious. Quantitative analysis of the Chinese bronze ritual vessels in the collection enabled the Gallery to ascertain the alloy constituents of each piece. Consequently, it was possible to understand more fully the bronze technology of the people who made the bronzes; and eventually the information will be of inestimable value in dating and sorting out the place of

manufacture. The results of those researches have been published in The Freer Chinese Bronzes, Vol. II. The Gallery is now pursuing similar research on other groups of objects in the collection.

To continue the quantitative analysis and restoration of collections on a more timely basis, an additional conservator ($13,000) is required. Continuing advances being made in the analysis and conservation of art objects necessitate the purchase of new equipment ($2,000) that will enable the laboratory to provide more precise information with greater speed.

Library - The Freer Gallery of Art library specializes in materials related to the art and culture of the Far and Near East. Books, periodicals, photographs, slides, maps, and archival material on all phases of the Freer collection come within its jurisdiction. The library is open to the public and is widely used by scholars doing research on all aspects of Oriental art. In addition, library personnel take part in the cataloguing and documentation of objects in the collection and provide information about the collection on an international basis. Since approximately half of the titles in the library are in Chinese, Japanese and other Oriental languages, it is important that some of the personnel have a working knowledge of one or more of those languages. Funds for an assistant librarian ($16,000) fluent in Chinese and Japanese are requested.

Photography - The inexpensive and prompt preparation of photographs and slides and copies of documents and records is one of the most important public educational services provided by the Gallery. Requests for this service have continued to increase. Additional equipment for photographing and storing the photographs and slides is essential if the Gallery is to properly meet its responsibility to the public ($5,000). In addition, an amount of $3,000 is requested for the rental of a photocopier.

ARCHIVES OF AMERICAN ART

1973 Actual.....$200,000
1974 Estimate.....$234,000
1975 Estimate.....$284,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	12	1	13
11 Personnel Compensation.....	174	19	193
12 Personnel Benefits.....	15	1	16
21 Travel & Trans. of Persons..	4	1	5
22 Transportation of Things....	3		3
23 Rent, Comm. & Utilities.....	16	4	20
24 Printing and Reproduction...	15	8	23
25 Other Services.....	3	6	9
26 Supplies and Materials.....	3	4	7
31 Equipment.....	1	7	8
TOTAL	234	50	284
Analysis of Increase			
Necessary Pay.....		7	
Support Funds.....		43	

ABSTRACT - The Archives of American Art (AAA) aids research and scholarship in the history of visual arts by acquiring, organizing, and preserving the primary documentation needed by historians. In FY 1975 an increase of 1 position and $43,00

is requested to meet the following support needs: (1) one archives aide ($7,000) and additional funds of $17,000 to increase processing capability in the Washington center, thereby reducing backlog of unprocessed and unfilmed work; (2) $11,000 to fund contracts with microfilming firms for on-site filming of valuable collections of historical records; and (3) $8,000 to fund inflationary increases in the cost of rent, communications, shipping, printing, etc., in the regional offices. An additional amount of $7,000 is requested for necessary pay.

PROGRAM - The AAA is committed to aiding research and scholarship in the history of the visual arts in this country from prior to the Revolutionary War period to the present time. It acquires, organizes, and preserves the primary documentation needed by historians--the correspondence, diaries, business papers, and photographs of painters, sculptors, critics, dealers, and collectors, and the formal records of galleries, museums, and art societies. These collections of papers are catalogued, microfilmed, and made available to scholars. Several million original and microfilm items are now held and are being intensively used by staff and fellows of the National Collection of Fine Arts, the National Portrait Gallery, the National Gallery of Art, faculty and graduate students across the country, and by scholars from such places as Chicago, London, Munich, New Orleans, New York, Paris, Seattle, San Francisco, Stockholm, and Tokyo.

The processing and chief reference center of the Archives is located in space provided by the National Collection of Fine Arts and the National Portrait Gallery library. In order to make its holdings readily accessible to scholars throughout the country and to develop a systematic collecting program, small regional centers are currently maintained in Boston, New York, Detroit, and San Francisco.

An oral history program, begun in 1959, has become an historically significant activity. At the present time, the oral history collection comprises more than fourteen hundred transcripts of interviews with artists, dealers, collectors, and administrators.

The Archives anticipates income from private funds of about $155,000 in FY 1974.

JUSTIFICATION OF $43,000 INCREASE (Archives) - One of the primary areas of concern for the Archives has been its processing and chief reference center located in Washington. With the opening of the Detroit office on a full-time basis in FY 1973 and the San Francisco office in FY 1974, and with the continued success of the Boston office in acquiring such important collections as the Brown Gallery records and the papers of Stanley Woodward and Charles Hopkinson, an increased backlog of unprocessed and unfilmed work has continued to grow in the processing center in Washington. To eliminate this backlog (currently a full man-year of work, and growing), the Archives requires one full-time archives aide ($7,000), two 700-hour processing clerks ($6,000), one microfilm camera ($5,000), and $6,000 for increased processing and support costs.

In the New England area, art records have been largely unrecorded by other archival institutions. Several large and significant collections of records such as those of the National Academy of Design, Knoedlers, and the Kennedy Galleries in New York, and art related papers owned by the New York Historical Society and the Massachusetts Historical Society, are available to the Archives for filming but may not be removed from the premises, either due to size or security considerations. In addition, individual donors of papers often prefer the security provided by local handling of their material. An increase of $11,000 is requested to fund contracts with microfilming firms for the on-site filming of these records which cannot be shipped to the processing center in Washington.

General cost inflation has put an added burden on the regional offices. Increased rent and communication costs plus costs of shipping, material, printing, and other services have forced the regional offices to cut back in their collecting program. An increase of $8,000 is requested to offset this support problem in the regional offices.

NATIONAL ARMED FORCES MUSEUM ADVISORY BOARD

1973 Actual..... $146,000
1974 Estimate..... $144,000
1975 Estimate..... $146,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	6	0	6
11 Personnel Compensation.....	76	2	78
12 Personnel Benefits.....	6		6
21 Travel & Trans. of Persons..	2		2
23 Rent, Comm. & Utilities.....	2		2
24 Printing and Reproduction...	2		2
25 Other Services.....	54		54
26 Supplies and Materials.....	1		1
31 Equipment.....	1		1
TOTAL	144	2	146
Analysis of Increase			
Necessary Pay.....		2	
Program Funds.....		0	

ABSTRACT - The Board advises and assists the Board of Regents of the Smithsonian Institution on matters concerned with the portrayal of the contributions of the Armed Forces of the United States. No program increase is sought for FY 1975. An amount of $2,000 is requested for necessary pay.

PROGRAM - The National Armed Forces Museum Advisory Board, established by Public Law 87-186 (approved August 30, 1961), advises and assists the Board of Regents of the Smithsonian Institution on matters concerned with the portrayal of the historical contributions which the Armed Forces of the United States have made to national development; on matters relating to the implementation of a Bicentennial Outdoor Museum; and on matters relating to the Dwight D. Eisenhower Institute for Historical Research, which is funded by the National Museum of History and Technology.

In 1976 the Smithsonian Institution will present, in cooperation with the Department of the Interior and other interested agencies, a special Bicentennial living-history program consisting of an authentic re-creation of the daily camp life of the citizen-soldier of the American Revolution. Present plans anticipate daily public performances by a cast of approximately 150 people for a period of about 10 weeks. This presentation is being planned and will be produced by the present staff of the National Armed Forces Museum Advisory Board. (Program funding has been requested under the American Revolution Bicentennial Program.)

OFFICE OF THE ASSISTANT SECRETARY FOR PUBLIC SERVICE

1973 Actual.....$178,000
1974 Estimate.....$139,000
1975 Estimate.....$234,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	8	3	11
11 Personnel Compensation.....	121	72	193
12 Personnel Benefits.....	10	6	16
21 Travel & Trans. of Persons..	4	2	6
23 Rent, Comm. & Utilities.....		2	2
24 Printing and Reproduction...		2	2
25 Other Services.....	2	9	11
26 Supplies and Materials.....	1	2	3
31 Equipment.....	1		1
TOTAL	139	95	234
Analysis of Increase			
Necessary Pay.....		5	
Support Funds.....		90	

ABSTRACT - The Office of the Assistant Secretary for Public Service guides and supports the public service units in the development of programs to advance the Institution's objectives in education and information. An increase of 3 positions and funding in the amount of $90,000 is sought to support video work, to coordinate all educational programs from elementary through advanced studies, and to provide additional administrative help. Funds in the amount of $5,000 are sought for necessary pay.

PROGRAM - The primary functions of the Office of Public Service are to stimulate, to coordinate, and to supervise the steadily increasing activities of the Smithsonian's educational and public service components. These include the unique experimental efforts of the Anacostia Neighborhood Museum, the many-faceted work of the Division of Performing Arts in synthesizing and presenting to the American public across the nation the historical and continuing development of the American aesthetic experience, the programs of the Office of Elementary and Secondary Education to make the Smithsonian's facilities and collections accessible and pertinent to visiting school children, the dissemination of Smithsonian research and interests through the Smithsonian Press and the Smithsonian Magazine, the organization and conduct of meaningful adult and teenage educational presentations by the Smithsonian Associates, a nation-wide basic educational program conducted by Reading Is Fundamental, Inc. under Smithsonian auspices, and an active public affairs operation dedicated to keeping Americans currectly informed of the educational programs and exhibits available to them at or through the facilities of the Smithsonian Institution.

JUSTIFICATION OF $90,000 INCREASE:

Public Orientation and Education - The need to use modern technology for education has prompted the Smithsonian to employ a video program coordinator. The potential use of audio-video communications for information transfer and educational services is tremendous. Someone familiar with telecommunications would strengthen this effort ($16,000). The Free Film Theater is run in the Museum of History and Technology. Additional funds are requested to bring outstanding educational films to the public. Recently "The Ascent of Man" series has been shown. Due to its

popularity, additional showings have had to be scheduled and admission has been by ticket. Additional money for rentals ($3,000) would make possible the showing of additional high quality films.

In pursuance of its basic mandate for the diffusion of knowledge the Institution devotes a major effort to public education. Exhibits fill part of this requirement, but their focus is necessarily broad in scope and only effective to the extent that the very general audiences who view them are receptive to their message. Research publications are another element of our education effort, but these in turn appeal for the most part to restricted audiences specifically interested in their contents. The Institution has therefore developed in recent years a wide range of direct educational efforts designed to meet the needs and to develop the interests of specific interest groups such as elementary and secondary school children and their teachers, pre- and post-doctoral researchers, seminar participants, minority group trainees, and groups of people of varying age and educational backgrounds but who share some specific common interest in pursuit of which they are enrolled in a Smithsonian Associates class. These special educational activities are planned and conducted in several small program offices including those under the general heading of Academic and Educational Programs, as well as in the major museums and galleries which properly have programs tailored to their own collections, exhibitions, and audiences. Adequate planning assistance, guidance, coordination, and evaluation of all these special education activities is required at the Institutional level. A coordinator of programs is requested ($26,000) with office support funds ($3,000).

General Administration - A special assistant for programs is needed to help the Assistant Secretary with operational and programming functions ($31,000). Funds are also required for travel and office expenses ($11,000).

ANACOSTIA NEIGHBORHOOD MUSEUM

1973 Actual..... $261,000
1974 Estimate..... $319,000
1975 Estimate..... $382,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	21	0	21
11 Personnel Compensation.....	206	10	216
12 Personnel Benefits.....	18	1	19
23 Rent, Comm. & Utilities.....	28	14	42
24 Printing and Reproduction...	12	2	14
25 Other Services.....	39	36	75
26 Supplies and Materials.....	10		10
31 Equipment.....	6		6
TOTAL	319	63	382
Analysis of Increase			
Necessary Pay.....		11	
Support Funds.....		52	

ABSTRACT - The Anacostia Neighborhood Museum (ANM) provides a relevant and educational museum experience for audiences unaware of or unaffected by major museum resources on the Mall. An exhibits design and production laboratory, presently under construction, will provide a facility for training museum technicians and for producing exhibits pertinent to and representative of the lives and experiences of minority group members. An increase of $52,000 is requested in FY 1975 to meet the following support requirements: (1) Buildings and Facilities Management - $50,000

to fund operating and maintenance costs of the new laboratory facility, e.g. utilities, telephone, custodial services, office furnishings, supplies, and equipment and (2) Printing and Reproduction - $2,000 to fund printing costs of exhibit catalogues and educational pamphlets and brochures. An additional $11,000 is requested for necessary pay.

PROGRAM - ANM was opened in 1967 to reach out to new audiences who are unaware of museum resources, physically too far from them, or, as inhabitants of low-income population density centers, do not see the interest or relevance of museums. By linking its research, exhibits, and education activities directly to the needs of the community, the ANM has assured a fresh, nontraditional approach to the role of the museum. The Museum is a combination of many things. It offers learning experiences through changing exhibits on subjects relevant to the community. It serves as a community center, recreational facility, and arts and crafts workshop. Exhibit and education efforts have focused on Black history, music, and the fine arts as well as urban problems. Two major exhibits have been produced in FY 1974--"Africa - Three Out of Many: Ethiopia, Ghana, Nigeria" and the "Barnett-Aden Exhibition," a private collection composed largely of the works of important Afro-American artists.

Activities in the education area include guided tours of museum exhibits; special programs and activities in the Children's Room, ranging from demonstrations in soap making to seminars and forums on housing, urban renewal, and mass transportation; films, lectures,and a pilot seminar conducted in cooperation with the Career Development Department of the D. C. schools; many performing arts programs such as the Young People's Festival of the Arts; and major outreach efforts in the Anacostia schools.

JUSTIFICATION OF $52,000 INCREASE:

Buildings and Facilities Management - In the field of exhibits preparation, there is a great need for creative people who are sensitive to the needs of inner city minority groups. In an attempt to alleviate this shortage, which exists not only in the Smithsonian but also throughout the museum field, the ANM is establishing an exhibits design and production laboratory. The Laboratory will be at once a facility for training minority museum technicians, a facility for the production of exhibits and related educational materials for the needs of the ANM and the Smithsonian Institution's Bicentennial programs, and a community center. Its primary function will be a vocational training center for minority museum technicians drawing on local Anacostia residents for the initial trainees, the Laboratory will give on-the-job training in exhibits design and production while experimenting in novel exhibition techniques. When in full operation, the Laboratory will train technicians from all over the country and produce exhibits relevant to minority groups as a function of the Bicentennial outreach programs of the Smithsonian. Using funds appropriated under the American Revolution Bicentennial heading, construction of a laboratory facility has begun and is expected to be completed by the end of FY 1974. The first two years of the training program with prospect for extension will be financed primarily through a foundation grant. Currently, however, no funds have been provided for the operation and maintenance of the Laboratory. An increase of $50,000 is requested in FY 1975 to fund the costs of telephone service; utilities; custodial services; office furnishings, supplies,and equipment; and various operating costs which will occur in the initial year's occupation of a new building.

Printing and Reproduction - In the past, printing needs of the ANM were funded primarily with private funds. Today, with increased printing requirements for exhibit catalogues and educational materials, rising printing costs, and private funds becoming more and more difficult to obtain, support funds available in the Smithsonian Press for the ANM ($1,500) have proved to be totally inadequate. An increase of $2,000 is requested to provide more realistic and dependable support of the Museum's printing needs.

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INTERNATIONAL EXCHANGE SERVICE

1973 Actual.....$152,000
1974 Estimate.....$176,000
1975 Estimate.....$181,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	9	0	9
11 Personnel Compensation.....	100	5	105
12 Personnel Benefits.....	9		9
22 Transportation of Things....	61		61
26 Supplies and Materials.....	5		5
31 Equipment.....	1		1
TOTAL	176	5	181
Analysis of Increase			
Necessary Pay.....		5	
Program Funds.....		0	

ABSTRACT - Through the International Exchange Service, public and private institutions in the United States exchange publications with organizations in other countries. This includes the exchange of official publications such as the Federal Register, the Congressional Record, and U.S. Patent Specifications, as well as private publications such as medical and dental texts. No program fund increase is being requested in FY 1975. An amount of $5,000 is requested for necessary pay.

PROGRAM - In 1849 the Smithsonian Institution established a system for the exchange of Smithsonian publications with the learned societies of other countries. This program was so successful that later it was expanded to other American organizations. The Exchange's responsibilities were formalized when the Brussels Convention of 1886 was adopted by the United States, and the Smithsonian Institution became the official exchange bureau in the United States for the international exchange of literary, scientific, and cultural publications. In addition, 14 Stat. 573, as amended, provides that the exchange of the United States Government publications shall be made through the Smithsonian. In FY 1973, approximately 2.5 million publications were transmitted to over 100 countries for exchange documents.

DIVISION OF PERFORMING ARTS

1973 Actual.....$313,000
1974 Estimate.....$356,000
1975 Estimate.....$362,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	10	0	10
11 Personnel Compensation.....	219	6	225
12 Personnel Benefits.....	19		19
21 Travel & Trans. of Persons..	12		12
22 Transportation of Things....	3		3
23 Rent, Comm. & Utilities.....	2		2
24 Printing and Reproduction...	4		4
25 Other Services.....	80		80
26 Supplies and Materials.....	12		12
31 Equipment.....	5		5
TOTAL	356	6	362
Analysis of Increase			
Necessary Pay.....		6	
Program Funds.....		0	

ABSTRACT - The Division of Performing Arts is responsible for the surpervision and production of performing arts activities at the Smithsonian, emphasizing those programs that deal with our national aesthetic expressions and that relate to the collections of the museums. No program increase is sought for this activity in FY 1975. Necessary pay in the amount of $6,000 is being sought.

PROGRAM - The Division of Performing Arts is responsible for the supervision and production of public performances particularly as they evidence themselves in oral, music, or dance forms. The Festival of American Folklife that was presented at a new location on the Mall, along the reflecting pool, and for a longer period, was well received in July 1973. This location will probably be used again in 1974 because of the disruption Metro construction has caused on the old Mall location. This Festival, produced in cooperation with the National Park Service, provides an educational experience for a million visitors. The Division's Jazz Series has been widely acclaimed by audiences and critics alike. The recent publication of the Smithsonian Collection of Classic Jazz (on recordings) has already had major impact on the teaching of American musical history. By staging such events, the Division undertakes to extend and enliven the Institution's educational services to the public.

OFFICE OF PUBLIC AFFAIRS

1973 Actual..... $405,000
1974 Estimate..... $310,000
1975 Estimate..... $318,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	12	0	12
11 Personnel Compensation.....	211	8	219
12 Personnel Benefits.....	18		18
21 Travel & Trans. of Persons..	2		2
24 Printing and Reproduction...	49		49
25 Other Services.....	22		22
26 Supplies and Materials.....	7		7
31 Equipment.....	1		1
TOTAL	310	8	318

Analysis of Increase	
Necessary Pay.....	8
Program Funds.....	0

ABSTRACT - The Office of Public Affairs is responsible for communication of information about the Smithsonian and its programs to the public through various media--radio, television, newspapers, popular and scientific periodicals, press releases, documentary films, and general information and visitor orientation pamphlets and other items. No additional program funds are requested in the FY 1975 budget. Necessary pay in the amount of $8,000 is sought for current staff.

PROGRAM - The Office of Public Affairs serves millions of museum and gallery visitors annually, as well as the general public, through the communication of factual and educational data about the Smithsonian and its programs. A wide array of communications media are used: radio, television, newspapers, popular and scientific periodicals, press releases, documentary films, the Smithsonian Calendar of Events, Dial-A-Phenomenon, Dial-A-Museum, and general information pamphlets and publications. It also prepares and makes available to museum visitors a variety of building guide leaflets to assist them in their tours of buildings and exhibits. Included in its presentations are the Torch newspaper, Research Reports, and the "Radio Smithsonian" now heard over 95 stations across the nation. The Office of Public Affairs also administers the Office of Special Events, which assists with exhibition openings, seminars, meetings, and special activities held in Smithsonian facilities in Washington, D. C.

SMITHSONIAN INSTITUTION PRESS

1973 Actual.....$801,000
1974 Estimate.....$823,000
1975 Estimate.....$864,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	26	1	27
11 Personnel Compensation.....	420	38	458
12 Personnel Benefits.....	34	3	37
21 Travel & Trans. of Persons..	2		2
24 Printing and Reproduction...	358		358
25 Other Services.....	5		5
26 Supplies and Materials.....	2		2
31 Equipment.....	2		2
TOTAL	823	41	864
Analysis of Increase			
Necessary Pay.....		16	
Support Funds.....		25	

ABSTRACT - The Smithsonian Institution Press is reponsible for the editing, design, production, and distribution of printed material produced by historians, scientists, and curators. Included in this work are books, catalogues, pamphlets, and leaflets. An increase of one position and $25,000 is requested for a support requirement in Printing and Reproduction to employ an editor. An additional amount of $16,000 is being sought for necessary pay.

PROGRAM - Press publication activity is a fundamental extension of the work of the Smithsonian's basic research laboratories. Necessary for ecological and agricultural advancement and other basic and applied studies by researchers, these reports are distributed to major libraries and scientific institutions in all 50 states and many foreign countries. For the many millions of visitors to the Smithsonian each year, the Press edits manuscripts and issues contracts for the printing of exhibit catalogues, education pamphlets, and informative leaflets. The Press reviews each manuscript submission for editorial content and completeness, quality of typing, illustrations, etc. before acceptance. Inadequately prepared manuscripts (i.e. those that would be too costly to edit or manufacture) are not accepted for publication. Finally, the Press furnishes the Institution with a variety of necessary manuals, reports, and directories, including copies of Congressional materials and reports from Government agencies.

JUSTIFICATION OF $25,000 INCREASE (Printing and Reproduction) - The volume of manuscripts is growing and is anticipated to reach 40,000 pages over the next two years as a result of increased productivity on the part of the scientific staff and Bicentennial preparations and presentations. The volume of manuscript production varies substantially among the various bureaus and for this reason, special funding requirements for FY 1975 are being justified in the bureaus generating the increased workload. For a trial period the funds existing in the FY 1974 Press base for printing are being retained by the Press. This will allow flexibility in responding to fluctuating needs and ensure efficient application of this resource.

An increase ($25,000) is requested to employ an additional editor. Depending on the complexity of the material, an editor can process about 2,200 manuscript pages per year. The current staff of 13 editors and designers can produce about 29,000 pages. The additional editor will help in the timely production of finished publications.

OFFICE OF THE ASSISTANT SECRETARY FOR MUSEUM PROGRAMS AND OFFICE OF MUSEUM PROGRAMS

1973 Actual.....$296,000
1974 Estimate.....$337,000
1975 Estimate.....$413,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	9	3	12
11 Personnel Compensation.....	144	60	204
12 Personnel Benefits.....	14	5	19
21 Travel & Trans. of Persons..	12	1	13
23 Rent, Comm. & Utilities.....	9		9
24 Printing and Reproduction...	16		16
25 Other Services.....	125	3	128
26 Supplies and Materials.....	10	2	12
31 Equipment.....	7	5	12
TOTAL	337	76	413
Analysis of Increase			
Necessary Pay.....		7	
Support Funds.....		69	

ABSTRACT - The Office of the Assistant Secretary for Museum Programs oversees and reviews the Institution's museum and exhibition activities, with special emphasis in developing experimental and educational exhibits, surveying visitor reactions to the Institution's services, and providing advice and technical assistance to other museums.

An increase of 3 positions and funding of $69,000 is requested to meet the following support requirement: General Administration - an executive assistant for the Assistant Secretary, a curator for the Arts and Industries Building, and a secretary. An additional amount of $7,000 is being sought for necessary pay.

PROGRAM - The Office of the Assistant Secretary for Museum Programs oversees and reviews the general administration of the Office of the Registrar, Conservation Analytical Laboratory, Office of Exhibits Central, Smithsonian Institution Libraries, Smithsonian Institution Traveling Exhibition Service, Smithsonian Archives, National Museum Act, and the Arts and Industries Building. In addition, it cooperates with museum professionals and their associations and organizations to increase the effectiveness of museums in the performance of their scholarly and public education functions.

The Office of Museum Programs (OMP) maintains three technical programs: (1) a training workshop program in museum practices, (2) a series of audio-visual presentations (slides and video) in conservation techniques, and (3) psychological research measuring the effectiveness of exhibit and educational programs. OMP offers a series of technical workshops to museum professionals throughout the United States. In FY 1975, approximately 25 one-week workshops will be presented on such topics as model-making, lighting, exhibit design, financial planning, etc. These workshops provide on-the-job training. The second special program disseminates information on conservation techniques and practices through the production of slide/audio cassette kits, such as "The Cleaning of Prints, Drawings, and Manuscripts on Paper: Dry Methods," "Handling of Ethnological Specimens," and "Cleaning and Protecting Silver Objects." Twelve individual titles will be completed by the end of FY 1974. Also, 40 one-hour video tapes are produced for student training in conservation. The third major project consists of research studies exploring the learning potentials of museum

exhibits. Currently, research projects are in progress examining the informative levels of guided tours for school youngsters, orientation materials and programs for the general visitor, and a survey of reactions to exhibits of natural history.

JUSTIFICATION OF $69,000 INCREASE (General Administration) - The Arts and Industries Building, which was completed in 1881, has been declared to be a "Landmark of Importance," by the Joint Landmarks Committee of the National Capital Planning Commission and the Commission of Fine Arts. This building was originally constructed to house large collections of great value donated by foreign governments and other exhibitors at the Philadelphia Centennial Exposition of 1876. Currently it is being used to display test exhibits from the National Air and Space Museum's collections.

For the Bicentennial this exhibition space will be converted into an "Exposition Hall" displaying materials from the national collections held by the National Museum of History and Technology. A curator and secretary ($33,000) are needed to provide on-the-spot supervision of the installation and maintenance of this exhibition and others that will follow. The curator will also be responsible for the acquisition and inventory of antique furnishings that are expected to be acquired to restore public areas to close to their original appearance. Other object spending ($11,000) is requested to provide travel, other services, supplies, and equipment for the curator.

An executive assistant ($25,000) to the Assistant Secretary is requested. He will act as a liaison between the Assistant Secretary and the units reporting to him and will be available to aid the Assistant Secretary in preparing reports and undertaking special studies. No assistant is currently available for assignment to these tasks.

CONSERVATION-ANALYTICAL LABORATORY

1973 Actual.....$263,000
1974 Estimate.....$377,000
1975 Estimate.....$571,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	19	7	26
11 Personnel Compensation.....	223	104	327
12 Personnel Benefits.....	19	9	28
21 Travel & Trans. of Persons..	10	5	15
23 Rent, Comm. & Utilities.....		1	1
25 Other Services.....	61	27	88
26 Supplies and Materials.....	11	10	21
31 Equipment.....	53	38	91
TOTAL	377	194	571
Analysis of Increase			
Necessary Pay.....		9	
Support Funds.....		185	

ABSTRACT - The Conservation-Analytical Laboratory (CAL) advises on the suitability of building environmental conditions for objects displayed or stored, examines and treats objects for their protection and preservation, analyzes objects for basic research data of interest to scientists and historians, and conducts training programs. The FY 1975 budget proposes an increase of 7 conservators and $185,000 to continue the phased development of the Laboratory's capability to respond to the conservation needs

of newly acquired objects as well as the analysis and treatment of deteriorating objects already in the collections. An amount of $9,000 also is requested for necessary pay.

PROGRAM - The Conservation-Analytical Laboratory was established in 1963 to serve the museums of the Smithsonian Institution. Staffed by conservators and scientists, it ascertains and advises on the suitability, for artifacts displayed or in storage, of environmental conditions found in the buildings and suggests remedial action if necessary. Based upon examination or analysis, advice is given to curatorial units on conservation procedures for specific objects. Objects which cannot be treated locally, which present special problems, or require more specialized equipment than is available in these units, are treated in this central laboratory.

Analyses of objects or their materials (e.g. pigments, fibers, alloys, or corrosion products) by advanced instrumentation serve to determine appropriate conservation procedures or to provide museum archaeologists and historians with basic research data concerned with dates, attribution, and ancient production methods. Commercial products proposed for prolonged contact with artifacts (or fumigants used in storage) are examined for suitability.

For conservators in the bureaus there are regular lectures and technical information on specific subjects is made available as audio tapes and tape-slide lectures through conservation information programs.

JUSTIFICATION OF $185,000 INCREASE (Conservation) - Museums serve a unique role in that they are the primary guardians of the evidence of man's cultural development from the earliest times onward. Museum collections, including artifacts, specimens, and works of art, are primary resources in the functions of exhibit display and research. Museums must be able to transmit to future generations the heritage which previous civilizations have left. For a substantial part of the objects in museum collections this is not likely to occur if greater attention is not given to the needs of conservation. Every material ages and that age brings disintegration. During the last millenia the external factors accelerating this process of decay have been virtually entirely natural in their causes. But over the last century and a half, man has contributed and accelerated this process with the pollution of his increasing urban and industrial society. As a result, objects which under different conditions could have remained sound for decades, or even centuries, are now crumbling. Conservation of the collections requires constant attention to environmental conditions in the buildings and other specialized treatment (including fumigation) to forestall deterioration and decay.

Restoration without a deep understanding of materials' properties and styles is not a complete solution. If it does not affect the causes, it may be worse than nothing. Causes of the decay must be understood. Fundamental research has to be done on the properties of materials; new techniques must be experimented with; and, particularly, new substances used for conservation or repair must be carefully tested to make sure that they will not, now or in the foreseeable future, react adversely with the materials that they are intended to consolidate, or behave towards the objects in a fashion comparable to the pollutants in the air.

The conservation program of the Smithsonian is inadequate to these needs. It must be strengthened both in individual bureaus and in the central Conservation-Analytical Laboratory. Successful conservation efforts in the bureaus require knowledgeable personnel capable of recognizing and correcting specific local conservation problems and treating those items not requiring specialized treatment by the central laboratory.

Accessions of artifacts number about 130,000 a year. Proper treatment of these objects alone is well beyond the present capability of the Institution's conservation facilities. Thirty-two man-years of work each year is estimated to be required for

new objects exclusive of the needs of hundreds of thousands of deteriorating objects already in the collections. Conservation and analytical work is detailed and painstaking. During FY 1973 with a staff of 14 scientists, conservators, and support, the CAL completed 202 requisitions involving 597 objects from 31 divisions of 13 bureaus and offices. The additional five positions (and additional space renovation funds approved in the FY 1974 budget) will allow additional projects to be handled, yet thousands of additional requisitions (each one of which might involve many objects) could be submitted by the museums and galleries if they could be undertaken by CAL. By comparison, the British Museum has a conservation-analytical staff of 75 (including 25 conservators and analytical scientists in the central laboratory); and the new Canadian Conservation Institute, which will have five regional centers, is hiring a staff of 100.

In FY 1975, the Laboratory requests seven additional conservators ($104,000) and funds for travel for professional consultation and instruction; services for equipment maintenance, installation, and computer usage; laboratory supplies; and analytical equipment. ($81,000)

OFFICE OF EXHIBITS CENTRAL

1973 Actual..... $2,314,000
1974 Estimate..... $1,247,000
1975 Estimate..... $1,285,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	69	0	69
11 Personnel Compensation.....	890	35	925
12 Personnel Benefits.....	76	3	79
21 Travel & Trans. of Persons..	8		8
22 Transportation of Things....	1		1
23 Rent. Comm. & Utilities.....	4		4
24 Printing and Reproduction...	20		20
25 Other Services.....	85		85
26 Supplies and Materials.....	83		83
31 Equipment.....	80		80
TOTAL	1,247	38	1,285
Analysis of Increase			
Necessary Pay.....		38	
Program Funds.....		0	

ABSTRACT - The Office of Exhibits Central (OEC), working in close collaboration with museum scientists, curators, and historians, prepares exhibits and related products for those museums, programs, and other offices not having their own in-house capabilities. OEC also provides specialized exhibit assistance to other bureaus and offices. No program increase is requested for this office. Necessary pay in the amount of $38,000 is sought for existing staff.

PROGRAM - The Office of Exhibits Central was established on July 1, 1973, as a result of a reorganization of the former Office of Exhibits Programs. This reorganization also provided for self-contained design and production units in the National Air and Space Museum, the National Museum of History and Technology, and the National Museum of Natural History. The new central office provides design, production, installation, and maintenance services to those museums, programs, and other offices of the Institution not having their own in-house capabilities for this

work and provides the following types of exhibit assistance to other museums whose programs do not require or allow full-time staffing and/or establishment of shop facilities. Consultation as well as job performance is available in the following specialized areas: label editorial services, exhibition lighting, exhibit motion picture production, audio-visual installation and maintenance, freeze-dry taxidermy and the services of models, plastics, and restoration laboratories (specializing in fluid, thermo-setting, and reinforced plastics used in museum applications).

OEC also provides and coordinates training in exhibition media and techniques with the Office of Museum Programs and is developing programs to research, design, develop, evaluate, and communicate new exhibition techniques, systems, and procedures of value to the museum community.

OFFICE OF THE REGISTRAR

1973 Actual.....$221,000
1974 Estimate.....$259,000
1975 Estimate.....$347,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	17	6	23
11 Personnel Compensation.....	158	66	224
12 Personnel Benefits.....	13	6	19
22 Transportation of Things....	84	10	94
25 Other Services.....	2	4	6
26 Supplies and Materials.....	1		1
31 Equipment.....	1	2	3
TOTAL	259	88	347
Analysis of Increase			
Necessary Pay.....		10	
Support Funds.....		78	

ABSTRACT - Since the 1880's, the Office of the Registrar has served as the Registrar for the National Museum of Natural History and the National Museum of History and Technology. This office also has served as the focal point for mail/messenger and shipping service. The role of this office is undergoing a review and it is anticipated that it will emerge as a Central Registrar for the Smithsonian.

An increase of 6 positions and $78,000 is requested to meet the following support needs: (1) Three positions ($34,000) and computer time ($4,000) to develop and begin to implement a Control System of Accession Data; (2) A shipping clerk ($9,000) and support funds ($12,000) to expand shipping service and increase shipping funds; and (3) Two positions ($19,000) to establish a central inquiry desk. Funds in the amount of $10,000 are also being sought for necessary pay.

PROGRAM - This office was established originally to handle the traditional tasks of shipping and documenting accessions. Since that time other duties have been assigned to this office. One of these, the mail/messenger service, will be moved by the beginning of FY 1975 to the Office of Plant Services in order to be more closely aligned with truck services. Better service to the users will result from this change.

The Central Registrar will emerge as the senior member among the registrars of the bureaus. The new office will assist the registrars in the bureaus in refining and extending registration techniques. The result will be an improved intellectual

and physical control over specimens by the bureaus and vastly improved information about holdings on the Institutional level.

JUSTIFICATION OF $78,000 INCREASE (Registration) - The Central Registrar will study and develop a system for control of accession data within the Smithsonian's SELGEM (Self Generating Master) program. SELGEM was developed by the Information Systems Divisions as a collections management system. With modifications it can be extended to cover collections in all the bureaus. A systems analyst and clerk ($24,000) are requested to assist the Central Registrar with systems development and inputting registration data to the computer. The Office of the Registrar still maintains the largest volume of registration data in the Smithsonian. Funds are also requested for computer time and related development expenses ($4,000). A registrar technician ($10,000) is requested to upgrade the registration efforts in small bureaus for integration into the total registration system.

A shipping clerk ($9,000) and related expenses ($12,000) are requested to enable the shipping office to respond effectively to requests for its services. With one new museum opening to the public, another under construction, and the volume of shipping that will result from the Bicentennial activities, the workload of this office is expected to increase sharply.

One of the jobs assigned to the Office of the Registrar is to open all mail addressed to "Smithsonian Institution". Once opened, some of the mail can quickly be referred to the appropriate offices. Other inquiries remain in the Office of the Registrar to be answered by them or to have the responses coordinated by this office. Two positions ($19,000) are requested to undertake this work on a full-time basis. Currently several hundred pieces of mail, of which about one hundred are public inquiries, are received daily in the Office of the Registrar.

SMITHSONIAN INSTITUTION LIBRARIES

1973 Actual.....$1,034,000
1974 Estimate.....$1,178,000
1975 Estimate.....$1,673,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	65	21	86
11 Personnel Compensation.....	822	253	1,075
12 Personnel Benefits.....	72	22	94
21 Travel & Trans. of Persons..	10	5	15
22 Transportation of Things....	2		2
23 Rent, Comm. & Utilities.....	25		25
24 Printing and Reproduction...	19	37	56
25 Other Services.....	21	23	44
26 Supplies and Materials.....	118	58	176
31 Equipment.....	89	97	186
TOTAL	1,178	495	1,673
Analysis of Increase			
Necessary Pay.....		38	
Support Funds.....		457	

ABSTRACT - The Smithsonian Institution Libraries provide the basic documentary resources and the information search and delivery services that are required by the research, exhibits, and administrative programs of the bureaus and offices of the Institution. An FY 1975 increase of 21 positions and $457,000 is sought to improve the Libraries standard of performance in four major areas: (1) research and information services - 13 positions and $181,000 to provide an acceptable level of on-site information and collection management services and to bolster branch library capabilities; (2) general reference and circulation services - 2 positions and $20,000 to meet demands for service which have increased over 30 percent since the staff was last augmented; (3) support services - 6 positions and $83,000 to provide services such as acquisition, cataloguing, binding, and preservation, and an additional amount of $35,000 to fund contracts with commercial binders and rare book specialists; and (4) book, journal and other documentary resources - $138,000 to purchase books and journals on subjects relevant to the Smithsonian research and exhibit programs. Necessary pay in the amount of $38,000 is also required.

PROGRAM - The Smithsonian Institution library facilities, consisting of a general library and several bureau libraries, support the research, exhibit, and educational programs of the Smithsonian Institution by acquiring, cataloguing, and indexing books, journals, documents and reports and providing research services based on these collections. The Libraries' collections have achieved national significance in natural history, American ethnology, fine arts, and the history of science, American technology, and culture.

JUSTIFICATION OF $457,000 INCREASE (Libraries):

Research and Information Services - Since 1964 the Libraries have been striving to improve the management and maintenance of library collections and the provision of on-site reference and information services in the bureaus in order to deliver assistance that is more responsive and supportive of bureau programs. Much of the preliminary work required to catalogue books held in the bureau libraries can be performed on-site in the bureaus, thereby reducing the time these books are out of circulation.

The bureau and branch libraries currently have reached about 40 percent (16 positions) of a goal of 39 positions. (This goal has been increased by two positions since FY 1973 in order to reflect new needs of the Cooper-Hewitt Museum.) The increase requested for FY 1975 of 13 positions and $181,000 will raise the level of staffing to 75 percent of requirements. Included in the $181,000 are funds ($19,000) for the purchase of supplies and equipment.

The additional staff will meet the following needs: (1) two positions ($21,000) to assist in the cataloguing of 13,000 unprocessed volumes (two-thirds of the collection) - National Air and Space Museum; (2) three positions ($47,000) to establish the position of bureau librarian, staff the three unmanned departmental libraries, and to integrate the separate parts of the Botany and of the Entomology libraries - National Museum of Natural History; (3) six positions ($72,000) to strengthen understaffed off-Mall bureaus, enabling them to provide full-time, on-site information and collection management services - Tropical Research Institute, Radiation Biology Laboratory, National Zoological Park, Cooper-Hewitt Museum of Decorative Arts and Design, Smithsonian Astrophysical Observatory; and (4) two positions ($22,000) to assist in the cataloguing of the 40,000-volume technical trade journal collection, acquired from the Patent Office - National Museum of History and Technology.

General Reference and Circulation Services - Information delivery services include the circulation of library materials among the Institution's central and branch libraries, the processing of loans with libraries outside the Smithsonian, and the response to requests for reference and bibliographic data. Special emphasis is directed towards meeting the requirements of the many offices and departments of the Institution that are too small and dispersed to be served efficiently and economically by on-site facilities. Demands upon the central services staff have increased by 30 percent from 18,500 requests for reference services to approximately 24,000 since the staff was last augmented in FY 1971. To respond to this increased demand on a more efficient and timely basis, an increase of two positions ($18,000) and $2,000 in support funds is requested.

Support Services - The General Library support services include the acquisition, cataloguing, binding, and preservation of library materials, and the maintenance of a union catalogue of holdings for the entire library system. There is currently a backlog of 140,000 uncatalogued and incompletely catalogued titles and 85,000 serial volumes that must be bound, filmed, or otherwise preserved. It is estimated that 11,300 titles will be acquired and catalogued in FY 1975, and an additional 2,700 titles will need to be recatalogued. With current methods, processing of these 14,000 titles would require 32 man-years of effort. Improved routines, including the use of computerized data bases, however, are expected to reduce this requirement to 23.5 man-years. In addition, the Libraries will continue to experiment with on-line computer cataloguing in an attempt to reduce processing effort per title. Additional resources required to meet this current workload as well as to begin elimination of the backlog are: acquisitions staff (2 positions, $18,000), cataloguing staff (2 positions, $21,000), binding and preservation staff (2 positions, $18,000), automatic data processing services ($20,000), and supplies and equipment ($6,000).

Binding support provided by Library personnel includes the preparation of materials for shipment to the binder and the monitoring of the quality of returned bound volumes. The actual binding must be contracted to commercial firms, including specialists in rare book binding and preservation. At an average cost of $6 per volume, the cost of binding the 14,000 serial titles and 3,000 monographs in need of binding each year would be approximately $102,000. Currently only $30,000 is available for this effort. An additional amount of $35,000 is requested in FY 1975 to fund contracts with commercial binders and rare book specialists.

Book, Journal, and Other Documentary Resources - In FY 1973 funds were available to acquire about 45 percent of the pertinent literature required to support the Institution's on-going research programs. Currently the average cost of books and journals is $22 and $25 respectively; and, based on conservative estimates, prices are increasing 11 percent a year. Additional funding in the amount of $138,000 is requested. This increase, which would allow the purchase of 3,000 journals and 4,800 monographs for a professional user population of approximately 800 researchers and scholars, would establish a base of $300,000 for this program, (85 percent of what is considered adequate).

SMITHSONIAN INSTITUTION TRAVELING EXHIBITION SERVICE

1973 Actual.....$25,000
1974 Estimate.....$76,000
1975 Estimate.....$77,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	5	0	5
11 Personnel Compensation.....	39	1	40
12 Personnel Benefits.....	3		3
21 Travel & Trans. of Persons..	5		5
22 Transportation of Things....	7		7
25 Other Services.....	22		22
TOTAL	76	1	77
Analysis of Increase			
Necessary Pay.....		1	
Program Funds.....		0	

ABSTRACT - The Smithsonian Institution Traveling Exhibition Service (SITES) provides carefully selected, well-designed, and widely circulated traveling exhibits covering a diversified range in the fields of art, design, science, technology, history, and education. These exhibits include not only Smithsonian exhibits, but also those organized and lent by numerous Government agencies and individuals and organizations throughout the world. No program increase is sought for FY 1975. Necessary pay for existing staff in the amount of $1,000 is requested.

PROGRAM - SITES, which has been in operation for 22 years, is the only nationwide organization circulating exhibitions of an inter-disciplinary curriculum serving specialized and general museum, galleries, educational and cultural organizations throughout the nation and is the sole official agency of the U.S. to circulate official exhibitions from abroad. In addition SITES acts as a consultant to organizations and persons who wish to circulate their own exhibitions and will administer the Institution's national exhibitions program for the Bicentennial. The non-Federal operating budget in FY 1974 is $194,000, not including a projected $200,000 of special purpose gifts, grants, and contracts.

Approximately 4.8 million people view SITES exhibitions annually (upwards of 600 installations viewed by an average of 8,000 each). Requests have been received from each of the fifty states and the District of Columbia as well as from Puerto Rico, other Caribbean Islands, Canada, and numerous countries abroad in FY 1974. One hundred and five exhibitions are presently circulating; existing demands for services could easily sustain twice that figure. Although six requests a day are received from institutions for SITES catalogue of exhibitions, only one out of six is able to afford the least expensive exhibition in spite of the reduction in average rental fees made possible by a Federal appropriation in FY 1974. (In FY 1973

exhibitions renting for over $200 numbered seventy-two, while those costing under $200 numbered twenty-nine. In FY 1974, fifty-two shows have rental fees under $200.) SITES mailing list of corresponding organizations numbers 2,200 (500 more than last year at this time) and increases at the rate of 30 per month. Colleges and universities are SITES most frequent customers (60 percent), followed by museums of all types and sizes (30 percent), and libraries (5 percent). All others make up the remaining 5 percent.

The number of bookings for each state for FY 1974 is shown. This list shows only bookings reserved as of January 1, 1974.

Number of Bookings Each State

FY 1974 (July 1, 1973-December 31, 1973)

Alabama	13	Nebraska	2
Alaska	6	Nevada	0
Arizona	4	New Hampshire	6
Arkansas	8	New Jersey	6
California	22	New Mexico	2
Colorado	9	New York	10
Connecticut	5	North Carolina	8
Delaware	9	North Dakota	1
District of Columbia	12	Ohio	26
Florida	16	Oklahoma	3
Georgia	8	Oregon	6
Hawaii	0	Pennsylvania	19
Idaho	10	Rhode Island	0
Illinois	29	South Carolina	19
Indiana	17	South Dakota	5
Iowa	11	Tennessee	20
Kansas	13	Texas	43
Kentucky	4	Utah	2
Louisiana	7	Vermont	4
Maine	4	Virginia	3
Maryland	8	Washington	2
Massachusetts	15	West Virginia	9
Michigan	25	Wisconsin	13
Minnesota	17	Wyoming	5
Mississippi	13		
Missouri	15		
Montana	11		

Partial Listing of Available or Scheduled Exhibits

American Coverlets
Antwerp's Golden Age
The Black Presence in the Era of the American Revolution
Understanding the Environment
Bikes
Folk Paintings from Dalarna
Handicrafts of the Southeast
Modern Housing Prototypes
Manuscripts of the American Revolution
In Beauty It is Begun: Native American Children's Art
Children in Bondage: Photographs of Child Laborers by Lewis Hine
The American Doll
Tropical Blossoms

NATIONAL MUSEUM ACT

1973 Actual.....$ 793,000
1974 Estimate.....$ 901,000
1975 Estimate.....$1,000,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	3	0	3
11 Personnel Compsensation.....	39	2	41
12 Personnel Benefits.....	4		4
21 Travel & Trans. of Persons..	16	1	17
23 Rent, Comm. & Utilities.....	4		4
24 Printing and Reproduction...	4		4
25 Other Services.....	1		1
26 Supplies and Materials.....	2		2
31 Equipment.....	3	-2	1
41 Grants.....	828	98	926
TOTAL	901	99	1,000
Analysis of Increase			
Necessary Pay.....		0	
Program Funds.....		99	

ABSTRACT - The National Museum Act is a technical assistance program granting funds for specific proposals which advance the museum profession at large through training, research, publication, or professional assistance. Through these programs, museum personnel have the opportunity to receive training which was not available previously. An increase of $99,000 is requested to permit the funding of additional worthy grant proposals.

PROGRAM - Public Law 91-629, approved December 31, 1970, reauthorized appropriations for the National Museum Act through FY 1974 and funding of $1,000,000 to the Smithsonian Institution each year. Of this amount $901,000 was appropriated for FY 1973, of which $100,000 was transferred to the National Endowment for the Arts and another $100,000 to the National Endowment for the Humanities as required by the legislation. Legislation has been introduced to extend the Museum Act for another 3 years. It is anticipated that this will be approved at the $1,000,000 level.

Funds appropriated to the Smithsonian Institution for the implementation of the National Museum Act are made available, primarily by grants and contracts, to museums, professional associations, and universities. Such funding is made in concert with the National Museum Act Advisory Council appointed for this purpose by the Smithsonian Institution. The membership of the Advisory Council encompasses the principal museum disciplines--art, science, and history--and is broadly representative of all regions of the United States. The Council advises and assists the Secretary in determining priorities and assessing the quality of programs seeking support under the Act.

JUSTIFICATION OF $99,000 INCREASE - Through January 1974, a total of 51 projects have been funded in the amount of $450,886. The balance of this year's appropriation will be awarded at the February and May 1974 meetings of the Advisory Council. To date, the following types of grants have been funded: 27 proposals for travel grants to beginning professionals to learn new methods and techniques at various museums; 5 proposals for research in conservation techniques; 3 projects for research in

interpretive methods and approaches; 5 grants to support the publication of technical information; 6 grants to support seminar/workshop training programs; 3 programs offering professional assistance to museums; and 2 special studies grants investigating data-banking for museums and training needs in conservation.

For the first half of FY 1974, 151 proposals have been received compared with the total of 122 proposals received in FY 1973. It is reasonable to expect the number of proposals to more than double by the end of the year. In funding proposals, the Advisory Council has insisted that all proposals clearly demonstrate how the projects will upgrade the profession--its techniques, methods, and approaches.

In addition to reviewing and processing grants, the Office of Museum Programs received approximately 600 inquiries about museum methods, problems, and opportunities. The Smithsonian Institution and the National Endowments for the Arts and Humanities, through their respective offices of museum programs, regularly consult and review programs in order to avoid overlap.

Based upon the positive response of the museum profession to the National Museum Act, the quality of the specific requests, and the great need of the profession, funding at the $1,000,000 level will permit the Smithsonian to support more fully all aspects of the National Museum Act.

SMITHSONIAN ARCHIVES

1973 Actual.....$108,000
1974 Estimate.....$135,000
1975 Estimate.....$173,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	7	3	10
11 Personnel Compensation.....	115	32	147
12 Personnel Benefits.....	10	2	12
21 Travel & Trans. of Persons..	1	1	2
25 Other Services.....	6	3	9
26 Supplies and Materials.....	2		2
31 Equipment.....	1		1
TOTAL	135	38	173
Analysis of Increase			
Necessary Pay.....		4	
Support Funds.....		34	

ABSTRACT - The Smithsonian Archives is the official memory of the Institution and a valuable research resource for scholars working in the history of American science and in the history of the cultural institutions which are under Smithsonian care. The Archives currently has physical control over one million documents and is developing intellectual control over several million additional documents held in research and curatorial areas. Three positions and $34,000 are sought for the Archives. Two positions and $16,000 would enable computerized control of archives to be extended and one position and $18,000 would be used to study and make recommendation on recent archives. An additional amount of $4,000 is being sought for necessary pay.

PROGRAM - The Smithsonian Institution holds a unique collection of museum objects and archives for research and exhibition. Natural history specimens, art objects, and

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other collections are interpreted by archival documentation which supplements and explains them. Archival records of the Smithsonian's activities also attract historians and other scholars interested in science and art in the nation's capital from the 1830's to the present. Some 1 million documents are now in the central archives.

The Smithsonian Archives strives to achieve intellectual control over the vast and dispersed archival resources of the Institution amounting to several million documents. In calendar year 1973 the Archives completed indexes to archives in two divisions of the National Museum of Natural History; worked in several other divisions of that Museum and in the National Museum of History and Technology; began substantial input of existing catalogues into the Smithsonian's computer program; accessioned 500 cubic feet of archives; supervised microfiliming of the Institution's main accession file which documents all holdings of the National Museum of Natural History and the National Museum of History and Technology; and reported 50 collections to the Library of Congress for inclusion in its catalogue of manuscript collections.

JUSTIFICATION OF $34,000 INCREASE (Archives):

Extend Computerized Control over Smithsonian Archives - The Smithsonian Archives and the Information Systems Division developed a computer program for control of information about archives. The program is operational in several areas within the Smithsonian. A secretary currently devotes one hour per day to typing input. To fully utilize the program, two clerks are requested to input data to the computer ($13,000). One clerk will work in the central archives and the other will work in the National Museum of Natural History and the National Museum of History and Technology. Support funds ($3,000) are also requested, mostly for computer processing time.

Upgrade Quality of Recent Archives - While most 19th century and early 20th century archival materials are preserved, more recent archives are threatened. No one is currently available for this work. Huge accumulations encourage hasty disposal, and some new forms, especially computer records, pose evaluation problems. Current records practices must be refined to ensure preservation of archives and speedy disposal of worthless materials. For this purpose, one archivist for current records ($17,000) and support funds ($1,000) are requested. Support funds include travel to locations in Boston and New York.

SMITHSONIAN INSTITUTION SPECIAL PROGRAMS

These special programs make use of total Institutional resources, including staff research competence, collections, and space for exhibits, to produce outstanding scholarship, exhibits and other presentations, and additional opportunities for public education. These special programs include:

--The American Revolution Bicentennial Program which will advance the Institution's efforts to celebrate and portray "The American Experience," the first two-hundred years of American history and what they may mean for the future.

--The Environmental Sciences Program which is designed to shed light on complex biological processes that need to be better understood before solutions to national ecological programs can be determined.

--The Major Exhibition Program which funds the design and production of exhibits of unusual national significance and timeliness.

--The Academic and Educational Programs office which conducts interdisciplinary seminar series, coordinates educational programs for students at the elementary and secondary school level, and provides opportunities for outstanding pre- and post-doctoral investigators from across the nation to work under the supervision of the Institution's professional staff.

--The Research Awards Program which enables the Institution to fund expecially meritorious studies through a competitive selection process.

Full descriptions of these programs appear in the following sections of this budget.

AMERICAN REVOLUTION BICENTENNIAL PROGRAM

1973 Actual.....$ 754,000
1974 Estimate.....$1,728,000
1975 Estimate.....$4,236,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	2	0	2
11 Personnel Compensation.....	210	604	814
12 Personnel Benefits.....	16	55	71
21 Travel & Trans. of Persons..	56	80	136
22 Transportation of Things....	19	18	37
23 Rent, Comm. & Utilities.....	8	24	32
24 Printing and Reproduction...	42	590	632
25 Other Services.....	1,050	984	2,034
26 Supplies and Materials.....	93	265	358
31 Equipment.....	230	-117	113
41 Grants.....	4	-4	
42 Insurance Claims & Indemn...		9	9
TOTAL	1,728	2,508	4,236
Analysis of Increase			
Necessary Pay.....		2	
Program Funds.....		2,506	

ABSTRACT - As early as 1965, Congress urged that "attention be given to special exhibits and activities commemorating the Bicentennial of the American Revolution." The last few years have fully proved the Congress' foresightedness. Bicentennial planning is now complete, and the result is an impressive and broad program including ten major exhibitions in the national museums in Washington; more than one hundred traveling exhibitions; important scholarly publications in the fields of anthropology, art, and history; special projects such as the Festival of American Folklife; and a new National Air and Space Museum. The individual projects are now into construction, installation, or publication phases. A program increase in the amount of $2,506,000 is being requested. Necessary pay in the amount of $2,000 is also being sought.

PROGRAM - The American Experience - FY 1975 Request:

Bicentennial Exhibitions

A Nation of Nations (National Museum of History and Technology)	$1,000,000
Ecology 200 (National Museum of Natural History)	500,000
Centennial--1876 (Arts and Industries Building)	400,000
The Artist and the American Scene (National Collection of Fine Arts)	37,000
Design in the City and The Americas (Renwick Gallery)	78,000
Revolutionary Period Exhibitions (National Portrait Gallery)	150,000
City with a Plan (Smithsonian Institution Building)	50,000
	$2,215,000

Traveling Exhibitions

Information and Exhibit Systems	337,000
Object-oriented Exhibitions (Smithsonian Institution Traveling Exhibition Service)	150,000
Exhibits Design and Production Laboratory (Anacostia Neighborhood Museum)	85,000
	$ 572,000

Special Bicentennial Projects

Festival of American Folklife (Division of Performing Arts)	$ 500,000
Bicentennial Outdoor Museum (National Armed Forces Museum Advisory Board)	244,000
	$ 744,000

Major Scholarly Projects

Inventory of American Paintings Before 1914 (National Collection of Fine Arts)	86,000
Bibliography of American Art (Archives of American Art)	60,000
Encyclopedia of North American Indians (Center for the Study of Man)	300,000
Sternwheeler Bertrand (National Museum of History and Technology)	60,000
	$ 506,000

Support

Visitor Orientation and Services for the Bicentennial Year	115,000
Administration	84,000 *
	$ 199,000
TOTAL	$4,236,000

*Includes funds for legislated pay increases for temporary staff assigned to all projects.

JUSTIFICATION OF PROGRAM - A full description of the Smithsonian's Bicentennial program, project by project, is included in the supplement to this budget. This funding summary cuts across project lines in a generalized presentation. Bicentennial funding requirements will decline in the future, but in FY 1975, with the move from the planning and development phase to a stepped-up production and realization phase, they increase. The many projects involving 10 bureaus are above and beyond the Institution's normal level of operations. They cannot be accomplished, in addition to maintaining the Smithsonian's regular program, without special support.

The largest need is for temporary manpower and contractual services. The major exhibitions in process, traveling exhibitions, an expanded and extended Festival of American Folklife, and a special Bicentennial Outdoor Museum require staffing considerably beyond normal levels. Funds will be used for temporary help in exhibits installation, restoration, and research; preparation of catalogue materials; management and coordination; and short-term contracts to accomplish needed work outside the Institution's capability. An amount of $2,919,000 is requested.

Another area of special need is printing and reproduction. The bulk of the funding will print approximately one-half of the twenty-volume Encyclopedia of North American Indians. The remaining funds will provide necessary panel reproductions for both museum and traveling exhibitions, computerized data production, and free visitor information materials on the Smithsonian and the Bicentennial. To support these efforts, $632,000 is requested.

In all the projects, additional supplies and materials are needed. Borrowed objects for exhibitions must be transported to Washington and insured. Special equipment must be acquired for use in exhibitions and reproductions produced for the Bicentennial Outdoor Museum. Funding of $549,000 is requested for these purposes.

Finally, $136,000 for transportation of persons is requested. A major portion of the funding will support extended field research and participant travel for the Festival of American Folklife. In addition, the museums must search for special objects and specimens to be included in the exhibitions. Travel is also necessary for research related to the major scholarly projects which are nation-wide.

ENVIRONMENTAL SCIENCES PROGRAM

1973 Actual.....$272,000
1974 Estimate.....$182,000
1975 Estimate.....$185,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	8	0	8
11 Personnel Compensation.....	96	3	99
12 Personnal Benefits.....	9		9
21 Travel & Trans. of Persons..	15		15
25 Other Services.....	47		47
26 Supplies and Materials.....	7		7
31 Equipment.....	8		8
TOTAL	182	3	185
Analysis of Increase			
Necessary Pay.....		3	
Program Funds.....		0	

ABSTRACT - The Environmental Sciences Program (ESP) was established in FY 1971 to provide coordinated environmental research at the Smithsonian. A plan has been developed to assemble and analyze biological and physical data on specific important ecosystems to predict the consequence of environmental change. Two Smithsonian research facilities, the Smithsonian Tropical Research Institute (STRI) in Panama and the Chesapeake Bay Center for Environmental Studies (CBCES), are the principle sites being used to carry out these studies. No program increase is requested in FY 1975. Funding in the amount of $3,000 is sought for necessary pay.

PROGRAM - The Environmental Sciences Program administers a long-range, multi-bureau study of natural fluctuations in several different ecosystems. The Smithsonian is particularly suited to undertake this type of research as a result of the range of disciplines represented in the various bureaus, its large collections of plants and animals with detailed distribution and abundance data, and its control over permanent and protected field-research sites in both temperate and tropical zones. Staff resources consist of specialists from several Smithsonian science bureaus--STRI, CBCES, the Radiation Biology Laboratory, the National Museum of Natural History, and the National Zoological Park, as well as from several universities.

A study is now being conducted in three contrasting environments: a tropical forest on Barro Colorado Island, an intertidal coral reef at Galeta Point (both STRI reserves in Panama) and a temperate estuary in the Rhode River (CBCES). At each site, a number of physical, chemical, and biological factors which vary with time and which together indicate stability, predictability, and variability of each environment are routinely measured. During FY 1974 special attention has been given to evaluating results and casting preliminary models of the data. The first data bank report displaying monitoring results will be produced this year. The ESP is not independent of other research at the various sites. It supplies environmental data to other projects and uses data collected by them. This cooperation is essential because the range of subjects being studied demands an interdisciplinary approach.

MAJOR EXHIBITION PROGRAM

1973 Actual.....$910,000
1974 Estimate.....$108,000
1975 Estimate.....$ 80,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	0	0	0
21 Travel & Trans. of Persons..	4	-1	3
25 Other Services.....	84	-24	60
31 Equipment.....	5	-5	
41 Grants.....	15	2	17
TOTAL	108	-28	80
Analysis of Increase			
Necessary Pay.....		0	
Program Funds.....		-28	

ABSTRACT - The major permanent exhibitions of the Smithsonian Institution are nationally and internationally recognized as among the best examples of public communication and education in the museum world. The Major Exhibition Program has as its purpose the production of such exhibitions that will supplement the regular exhibits programs of the museums. The "Benefits From Flight" exhibit underwent initial design in FY 1974. Design will continue at a reduced funding level in FY 1975.

PROGRAM - This exhibit, which will be on public view in the new National Air and Space Museum, will exemplify the many benefits that have accrued on earth as a result of the putting of a man on the moon. The development of this major exhibition requires a substantial research effort intended to produce an assortment of critically assessed real benefits along with the parameters of their development and their potential for future applications. This intensive research, now in progress, will probe in depth the scientific, technological, economic, historical, and social dimensions of selected benefits. The ongoing investigation combines the talents of the Smithsonian curatorial staff with the specialized talents of graduate students at various universities (supported by Smithsonian cooperative fellowships).

The high technology associated with, and nurtured within, the aerospace industry has been and is now being adapted to serve many other needs of our society. We have developed formidable military aircraft and space systems, the latter leading to man's reaching the moon. However, we also routinely view the weather from space, communicate by satellite, and are learning how to monitor the earth's resources using the Earth Resources Technology Satellite (ERTS). Moreover, many of the technological developments born in the military and space systems fields have spawned methods and products now used in our everyday lives--everything from improved paper towels to advanced medical diagnostic sensors.

In the National Air and Space Museum's major exhibit, "Benefits From Flight," the Smithsonian will convey to the visitor the history and meaning of these and many other similiar achievements, relating these to the visitor's world of work, home, and leisure. The exhibit will explore the process as well as the impact of air and space technology transfer and utilization.

JUSTIFICATION OF PROGRAM DECREASE (-$28,000) - FY 1974 is the principal year of the fundamental research on this project, which will continue in FY 1975. Actual production of the exhibit will take place in FY 1976 at an expected cost of $250,000.

ACADEMIC AND EDUCATIONAL PROGRAMS

1973 Actual.....$684,000
1974 Estimate.....$642,000
1975 Estimate.....$662,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	13	0	13
11 Personnel Compensation.....	192	13	205
12 Personnel Benefits.....	16	1	17
21 Travel & Trans. of Persons..	6		6
24 Printing and Reproduction...	4		4
25 Other Services.....	410	6	416
26 Supplies and Materials.....	7		7
31 Equipment.....	7		7
TOTAL	642	20	662
Analysis of Increase			
Necessary Pay.....		14	
Support Funds.....		6	

ABSTRACT - A major Smithsonian objective is to make its resources for learning available to the formal education community and to the general public. These efforts take the form of programs in higher education, advanced studies, and offerings at the elementary and secondary education level. An increase of $6,000 is requested to expand outreach efforts for the elementary and secondary education program. An additional amount of $14,000 is being sought for necessary pay.

PROGRAM - Since 1965 through its higher education program the Smithsonian has offered support, administered by the Office of Academic Studies, to 204 Ph. D. candidates and to 197 postdoctoral investigators to enhance their ability as scholars and teachers through collaboration and study with the Institution's research staff. Over 465 undergraduate and first and second-year graduate students have been offered the opportunity to consult the Institution's research staff and collections for short periods. These opportunities are extended both to strengthen the research capabilities of the Smithsonian and to make available to the scholarly and scientific community the Institution's specialized resources. Smithsonian research training augments formal academic studies. Its effectiveness derives from close cooperation with the nation's universities and colleges, which welcome opportunities for their students to receive specialized Smithsonian training that their own facilities cannot provide.

The Office of Seminars is responsible for the Smithsonian's International Symposia Series, its biennial program of public activities centering on a single theme of contemporary importance, from which are published the collected original papers presented and other relevant materials. Interdisciplinary seminar series are scheduled annually, often in cooperation with other institutions of learning. The office serves as a resource facility to universities, cultural organizations, and other branches of the government. In addition, the office coordinates special projects at the request of the Secretary and Assistant Secretaries.

The Office of Elementary and Secondary Education (OESE) coordinates the education programs which are now located directly in the museums. This office prepares teaching guides, audio-visual aids, and other educational materials, directed at pre-college students. It also serves as the liaison between the Smithsonian and the

District of Columbia schools, booking tours for all the bureaus, and is publishing a guide on tours and events of interest to the elementary and secondary level students.

JUSTIFICATION OF $6,000 INCREASE (Public Orientation and Education) - In the wake of the current and growing fuel shortage, many schools are reducing their programmed visits to the Smithsonian museums and galleries, which makes it imperative that we prepare to bring the educational offerings of the Smithsonian to the schools. Additional funds are needed to enable the Central Office of Elementary and Secondary Education to assist the OESE specialists in each of the Bureaus to expand their Outreach Programs with materials on Smithsonian collections and Smithsonian facilities designed for use in the classroom. While the materials will be used in whole or in part by education people in various bureaus it is the function of the central office to prepare and produce for them slide lectures, printed educational materials, and portable exhibits which can give elementary and secondary school students a stimulating picture of the range of Smithsonian research activity and exhibit facilities. $3,500 of the requested $6,000 total will be devoted to this effort. $1,200 more will be used to develop an audio-visual training program to recruit and orient the volunteer docents who conduct tours in the museums and galleries and who will make the presentations of Smithsonian programs in the schools. Although docents are assigned to specific museums and galleries, the basic docent training and orientation program is a function of the central OESE. Another $1,300 will be needed for preparation and production of audio-visual presentations to be used in contacts with school administrators, teachers, and education representatives of other museums and which will describe to them how to take advantage of the educational support offered by the Smithsonian.

SMITHSONIAN RESEARCH AWARDS PROGRAM

1973 Actual.....$450,000
1974 Estimate.....$450,000
1975 Estimate.....$450,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	0	0	0
41 Grants.....	450	0	450
TOTAL	450	0	450
Analysis of Increase			
Necessary Pay.....		0	
Program Funds.....		0	

ABSTRACT - The Research Awards Program finances special research projects which cannot be supported from the regular budgets of the bureaus. Since 1966, 240 proposals have been funded through this program, and more than 200 publications which are directly related to the research have been produced. No program fund increase is being requested for FY 1975.

PROGRAM - Prior to FY 1966, the Smithsonian Institution received funds from the National Science Foundation (NSF) for special research projects of individual staff members. In 1964, the Congress prohibited the NSF from making grants for scientific research to other Government agencies. The NSF instituted a further limitation that it would no longer make grants to any agency or institution receiving direct Federal appropriations. The Research Awards Program was begun in FY 1966 by an appropriation of $350,000 to the Smithsonian Institution for the purpose of financing new or continuing research projects formerly eligible for support from NSF.

Proposals are submitted each year by members of the Smithsonian Institution staff to support new and innovative research. All proposals have undergone a careful scientific or scholarly review in their respective bureaus before they are reviewed by an advisory committee of scientists from outside the Institution. Projects are selected on the basis of their showing an imaginative and exciting approach to research and scholarship efforts that could not normally be carried out with regularly budgeted departmental funds.

The work supported by the Research Awards Program is often the best of the Institution's productivity and the reason for acquiring professional staff of the highest competence and imagination. Further, the program provides an opportunity for researchers to engage in collaborative field research with colleagues located in other institutions. Many opportunities for participation in expeditions and other field projects would be lost were it not for the Research Awards Program providing funding assistance.

In FY 1974, members of the Smithsonian staff again submitted proposals for funding up to three years in order to provide for better stability, continuity, and planning of research. Of the 64 proposals received for FY 1974 amounting to $1,630,835, 40 were funded in the amount of $450,000. It is intended that the program will operate at this level in FY 1975.

OFFICE OF THE SECRETARY

1973 Actual.....$655,000
1974 Estimate.....$654,000
1975 Estimate.....$736,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	30	3	33
11 Personnel Compensation.....	508	62	570
12 Personnel Benefits.....	44	5	49
21 Travel & Trans. of Persons..	8		8
23 Rent, Comm. & Utilities.....	17	2	19
24 Printing and Reproduction...	1	5	6
25 Other Services.....	57	5	62
26 Supplies and Materials.....	7	3	10
31 Equipment.....	12		12
TOTAL	654	82	736
Analysis of Increase			
Necessary Pay.....		19	
Support Funds.....		63	

ABSTRACT - The Office of the Secretary is responsible for planning, implementing, and reviewing the progress of all Smithsonian operations. An increase for General Administration is sought for: (1) Two positions and $55,000 to strengthen the study and review function of Institutional issues in the Office of the Under Secretary and (2) One position and $8,000 to be used for the implementation of new travel regulations. An additional amount of $19,000 is being sought for necessary pay.

PROGRAM - The Office of the Secretary is responsible for planning, implementing, and reviewing the progress of all Smithsonian operations. The Office of the Secretary is composed of the immediate Office of the Secretary, the Office of the Under Secretary, the Office of the Director of Support Activities, the Travel Services Office, the Curator of the Smithsonian Institution Building, and the Secretary's Files.

The Travel Services Office, under the direction of the Director of Support Activities, assists official Smithsonian travelers in developing domestic and foreign travel plans, estimating costs, and planning the most economical routing in keeping with Government and Smithsonian Institution regulations.

JUSTIFICATION OF $63,000 INCREASE (General Administration) - A program assistant and a secretary ($40,000) in the Office of the Under Secretary are needed to investigate problems and issues for presentation to the Secretary. With the one program assistant provided in the current fiscal year and another transferred from the Management Analysis Office, the Secretary and Executive Committee now have a study group. The additional staff requested will enable the group to work on longer range problems. Other object funds ($15,000) will provide for equipment rental, consultant studies, printing, supplies, and equipment purchases for the entire Office of the Secretary.

An additional travel clerk ($8,000) is needed to handle the additional workload which will be placed on the office with the implementation of the Joint Agency Transportation Study's recommendation which will permit automatic payment of airline teleticketing charges. Under the new system it is recommended that no more than four Government Travel Requests be issued each month for all trips. However, necessary additional records and controls will be required to process accurately the monthly teleticketing report.

OFFICE OF THE GENERAL COUNSEL

1973 Actual.....$230,000
1974 Estimate.....$242,000
1975 Estimate.....$295,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	11	2	13
11 Personnel Compensation.....	208	45	253
12 Personnel Benefits.....	18	4	22
21 Travel & Trans. of Persons..	6	1	7
23 Rent, Comm. & Utilities.....	3		3
24 Printing and Reproduction...		1	1
25 Other Services.....	2	1	3
26 Supplies and Materials.....	3		3
31 Equipment.....	2	1	3
TOTAL	242	53	295
Analysis of Increase			
Necessary Pay.....		7	
Support Funds.....		46	

ABSTRACT - The Office of the General Counsel (OGC) is responsible for all Smithsonian legal matters. These legal matters combine those arising from the operations of a university-like, charitable corporation with those common to Government organizations. An increase of two positions (an attorney and a secretary) and $46,000 is requested to meet General Administration support needs. An additional $7,000 is being sought for necessary pay.

PROGRAM - The OGC is responsible for the legal matters of more than forty line programs and ten major staff offices and, at the same time, advises the Secretary and the Board of Regents on the administration of the Institution as a whole. The legal problems combine those arising from the operations of a university-like, charitable corporation with those common to Government organizations, and include: the limitations and obligations of Smithsonian operations in relation to the functions, authorities, and regulations of Government entities; legislative review, drafting, and liaison; the uses and restrictions of trust funds; litigation; application of judicial decisions and executive branch directives and regulations; contract negotiation; tort claims and settlements; Federal and State excise, sales, and gift taxes, deductions, and exemptions; patents and trademarks; copyrights; review of transfers by gift, loan, purchase, or bequest; and many areas of international law.

JUSTIFICATION OF $46,000 INCREASE (General Administration) - Legal review and consultation are essential for all new undertakings, such as the recent acquisition of the Hillwood estate, as well as for the administration of existing programs and operations. While some questions are not complex, the possible legal implications of these, as well as highly specialized problems, demand continuous legal monitoring. The addition of each new facility, program, or operation invariably adds to the base of legal matters to be considered. In addition, the broadening of the Institution's activities has raised new questions in complex legal areas, such as media agreements, trademark sanctions, and questions of court jurisdiction in contract litigation. As a result, the small OGC staff, consisting of four full-time and two part-time attorneys, is not adequate to keep abreast of the constantly increasing workload arising from the public service responsibilities of the Institution. The addition of one attorney and one secretary is therefore requested to help relieve this situation, at a cost of $42,000. An increase of $4,000 in support funds for travel necessary to review and counsel operations outside the Washington, D. C. area, for the continued legal education of the staff attorneys through attendance at conferences, and for office equipment and printing is requested.

OFFICE OF THE TREASURER

1973 Actual	$ 725,000
1974 Estimate	$ 824,000
1975 Estimate	$1,103,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	36	6	42
11 Personnel Compensation.....	450	91	541
12 Personnel Benefits.....	38	34	72
21 Travel & Trans. of Persons..	3		3
23 Rent, Comm. & Utilities.....	286	144	430
24 Printing and Reproduction...	10		10
25 Other Services.....	30	5	35
26 Supplies and Materials.....	4	1	5
31 Equipment.....	3	4	7
TOTAL	824	279	1,103
Analysis of Increase			
Necessary Pay.....		21	
Other Uncontrollable.....		80	
Support Funds.....		178	

ABSTRACT - The Office of the Treasurer provides financial management assistance and technical services to the Smithsonian. The postage indicia costs for the entire Smithsonian are reflected in this account.

An increase of 6 positions and funding of $178,000 is requested to meet the following support needs: (1) $50,000 for increased costs of mailing resulting from rising public correspondence; (2) 6 positions ($88,000) and support funds ($14,000) to strengthen accounting efforts; and (3) $26,000 for payment to the Office of Federal Employees Compensation as authorized by Section 8147 (b) of Title 5, United States Code. An amount of $21,000 is being sought for necessary pay. An additional amount of $80,000 is also being sought under the Uncontrollable Increases Section to finance postage rate increases.

PROGRAM - The Office of the Treasurer is composed of the Treasurer's immediate office, the Office of Programming and Budget, the Accounting Division, and the Contracts and Insurance Office.

The immediate Office of the Treasurer provides overall administration for financial planning, budgeting, investment policy, accounting, reporting, and insurance and contracts administration.

The functions of the Accounting Division are: (1) developing, implementing, and maintaining of financial accounting and payroll systems; (2) financial analyses and reporting; and (3) operations, including payroll, voucher auditing and processing, cash receiving and disbursing funds control (with over 1,000 cost centers), certification of payments, and data processing control.

The Office of Programming and Budget is responsible for the planning, formulation, agency-level presentation of estimates to the Office of Management and Budget and the Congress, execution, and review of the Institution's Federal budget. This office also prepares non-Federal budgets for presentation to the Treasurer, Under Secretary, Secretary, and the Board of Regents.

The Contracts and Insurance Office, which is financed with non-Federal funds, is responsible for the administration of contracts and grants from other institutions and agencies and for the administration of risk management programs.

JUSTIFICATION OF $178,000 INCREASE (General Administration) - The current postage indicia bill is $240,000. An increase of $50,000 is requested to meet the higher volume of mail that is expected to be sent in FY 1975. Such correspondence has been increasing steadily in recent years as new bureaus and offices have been added and public interest in Smithsonian activities, collections, exhibits, and research has mounted. This upward trend is now expected to accelerate with the opening of two major units, the Hirshhorn Museum in FY 1975 and the new National Air and Space Museum in FY 1976. The approaching Bicentennial events will mean additional correspondence for many other Smithsonian units.

These same forces are already affecting seriously the workload of the Accounting Division. More than 1,000 separate cost centers are now involved. Despite continuous analyses resulting in improved procedures and efficiency, there is steadily increasing pressure for more such computer programs, simplified forms and methods, improved equipment, and other means of coping with the increasing flow of transactions and the need for more adequate information to manage properly the wide-spread and varied activities of the Institution. To meet these needs, two additional systems analysts are required. Four more clerks are also essential to handle the larger volume of general accounting transactions, payrolls, and specialized financial reporting. To fund these six positions $88,000 will be needed together with another $14,000 of support funds for increased supplies and computer work.

Section 8147 (b) of Title 5, United States Code, provides for payments to be made to employees for injuries and to their families in case of death. These payments are made by the U. S. Department of Labor's Office of Employees' Compensation. They bill the agency in August of the next fiscal year. The bills are payable the following July. The Institution's bill in FY 1974 is $72,000. The bill for FY 1975 is $98,000. Therefore, a request is being made for the additional $26,000 to finance this additional cost.

OFFICE OF PERSONNEL ADMINISTRATION

1973 Actual..... $495,000
1974 Estimate..... $521,000
1975 Estimate..... $620,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	33	3	36
11 Personnel Compensation.....	454	76	530
12 Personnel Benefits.....	38	6	44
21 Travel & Trans. of Persons..	1		1
23 Rent, Comm. & Utilities.....	6		6
24 Printing and Reproduction...		5	5
25 Other Services.....	18	10	28
26 Supplies and Materials.....	4		4
31 Equipment.....		2	2
TOTAL	521	99	620
Analysis of Increase			
Necessary Pay.....		18	
Support Funds.....		81	

ABSTRACT - The Office of Personnel Administration has the responsibility for formulating policy over a wide range of activities for manpower planning and managerial development. In FY 1975 an increase of three positions and $81,000 is sought for the following purposes: (1) two personnel management specialists ($45,000) to assist in special classification and compensation studies and reduce the workload of the current consultants; (2) an additional secretary ($10,000) to handle clerical matters and allow personnel assistants more time for technical matters; (3) the part-time help of three vocational office trainees ($10,000) to help alleviate the clerical workload; and (4) support funds of $16,000 for printing, executive development, training, and supplies. An amount of $18,000 for necessary pay is also requested.

PROGRAM - The Office of Personnel Administration (OPA) has the responsibility for formulating policy over a wide range of activities for manpower planning and managerial development through employee training, performance evaluation, and labor relations. These programs generally fall into six broad categories: consultant services; career development and training; administration and direction; technical, clerical, and administrative support; recruitment and placement; and staff services. OPA also becomes involved in negotiating union contracts and provides assistance in their administration.

In FY 1974, approximately 40 training classes will be offered as a part of the career development program. OPA will continue to assist the bureaus in developing programs to expand career opportunities for employees with particular emphasis on individuals locked into "dead-end" positions. In addition, new recruitment sources are being developed, including such local contacts as D. C. Manpower, vocational schools, colleges, and universities.

JUSTIFICATION OF $81,000 INCREASE (General Administration) - The ratio of staffing of the Smithsonian for carrying out personnel functions is one personnel employee per 105 employees serviced. Government agency personnel offices average approximately one personnel employee per 80 employees serviced. The addition of two personnel management specialists ($45,000) would provide: (1) expertise in compensation and classification to support the consultants and to meet increasing demands for special classification and compensation studies resulting from reorganizations and other management improvement efforts; (2) needed concentration on the

handling of grievance, appeal, and disciplinary cases which are getting special emphasis in the courts; and (3) reduction of the workload of current consultants, permitting a greater responsiveness to employee needs.

The number of personnel actions handled per year has grown to 11,000. The processing of these actions can be greatly facilitated with the addition of a secretary ($10,000) and funding of $10,000 for three vocational office trainees (high school students who work four hours per day during the school year and full-time at other times to receive on-the-job training for use after graduation). In addition, these positions would relieve two personnel assistants from clerical duties, enabling them to devote full time to providing technical assistance for the consultants.

Support funds of $16,000 are needed to print a supervisory handbook, to offer expanded executive development and upward mobility programs (including funds for training programs offered by the Civil Service Commission and the purchase and rental of various training aids) and to replace deteriorating equipment.

OFFICE OF AUDITS

1973 Actual.....$142,000
1974 Estimate.....$150,000
1975 Estimate.....$170,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	8	1	9
11 Personnel Compensation.....	131	18	149
12 Personnel Benefits.....	12	2	14
21 Travel & Trans. of Persons..	5		5
25 Other Services.....	1		1
26 Supplies and Materials.....	1		1
TOTAL	150	20	170
Analysis of Increase			
Necessary Pay.....		5	
Support Funds.....		15	

ABSTRACT - The Institution's size, diversity, and variety of funding sources create a large volume of essential auditing assignments. Since its establishment, the Office of Audits has made important contributions to effective management. An increase of one position and $15,000 will improve the office's capability to reach its goal of a reaudit every five years. An amount of $5,000 is needed for necessary pay.

PROGRAM - The Office of Audits, established in FY 1970, is responsible for performing all internal auditing functions of the Smithsonian Institution. In order to ensure the utilization of effective management practices, it is the policy of this office to audit all principal programs, including administrative, financial and supporting programs, during each five-year period.

JUSTIFICATION OF $15,000 INCREASE (General Administration) - With more than fifty operating units, programs, and staff offices, several major appropriation accounts (totalling over $86 million in FY 1974), and a wide variety of other funds, there is a large volume of auditing to be done. With the current staff of 8 auditors, it will take another three years to complete the first audit cycle of all principal Smithsonian programs. Therefore, instead of reauditing every five years, the office

will be on a seven-year cycle. It is estimated that it would take a total of ten auditors to enable the five-year year reaudit program to become a reality. An additional auditor ($15,000) is requested to help meet this total staff requirement.

OFFICE OF EQUAL OPPORTUNITY

1973 Actual.....$ 89,000
1974 Estimate.....$101,000
1975 Estimate.....$104,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	5	0	5
11 Personnel Compensation.....	90	3	93
12 Personnel Benefits.....	8		8
21 Travel & Trans. of Persons..	1		1
25 Other Services.....	1		1
26 Supplies and materials.....	1		1
TOTAL	101	3	104
Analysis of Increase			
Necessary Pay.....		3	
Program Funds.....		0	

ABSTRACT - The Office of Equal Opportunity works to assure equality of opportunity in employment and in all policies and practices of the Institution. Several current programs involve the development and better utilization of the skills of minority employees, an improved communication system for handling grievances, and improvement of women's career advancement opportunities. No program fund increase is being sought for FY 1975. An amount of $3,000 is being requested for necessary pay purposes.

PROGRAM - The Equal Opportunity Program, established by Executive Order 11246 and further implemented by the "Equal Employment Opportunity Act of 1972," enacted as Public Law 92-261, requires the Smithsonian to conduct a positive action program which will provide true equality in all Smithsonian employment practices. It is the responsibility of the Office of Equal Opportunity to conduct such a program. Three major efforts currently underway include counseling, upward mobility, and the equal employment status of women.

The counselor program provides a channel through which employees may raise questions, discuss grievances, and receive resolutions of problems on an informal basis. This program has trained 23 part-time equal employment opportunity counselors who are permanent employees with other assigned duties. Some 150 persons were assisted in calendar year 1973.

The upward mobility program strives to ensure each employee the opportunity to seek and achieve his highest potential and productivity in employment situations with special emphasis being focused on employees at the lower levels of employment. Innovative ideas concerned with minority group training at the lower grade levels to correct inadequate education are currently being applied in several museum and support organizations. Additionally within the upward mobility program is the overseeing of civil rights compliance with direct assistance programs and contracts and grants to ensure that the recipients practice equal opportunity.

The women's coordinator program functions as the principal advisory service to management on all matters pertaining to the equal employment status of women. In FY 1974 a women's week was held with noted speakers, movies, and career counseling sessions. Guidance and operational overseeing are given to the Women's Council.

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OFFICE OF PRINTING AND PHOTOGRAPHIC SERVICES

1973 Actual.....$625,000
1974 Estimate.....$753,000
1975 Estimate.....$835,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	37	5	42
11 Personnel Compensation.....	498	69	567
12 Personnel Benefits.....	42	6	48
21 Travel & Trans. of Persons..	1		1
23 Rent, Comm. & Utilities.....	8		8
24 Printing and Reproduction...	20		20
25 Other Services.....	73	7	80
26 Supplies and Materials.....	80		80
31 Equipment.....	31		31
TOTAL	753	82	835
Analysis of Increase			
Necessary Pay.....		21	
Support Funds.....		61	

ABSTRACT - The Office of Printing and Photographic Services is the Institution's central agency for technical advice, guidance, and production in all matters concerning photographic, duplicating, and in-house printing services. The office coordinates photographic and printing activities and projects and supplies technical support to the curatorial, scientific, technical, and administrative staffs. It also provides photographs, slides, and transparencies with lectures to the general public, schools, research foundations, educational publications, other museums, and government agencies. An increase is sought for the following support needs: (1) Photography - 4 positions ($46,000) to add a scientific photographer, a studio photographer, a color photography technician, and a microfilm technician and additional funds ($4,000) to purchase necessary supplies and materials and (2) Printing and Reproduction - 1 position ($8,000) with support funds of $3,000 to increase in-house printing capability by the addition of a multilith operator. An additional amount of $21,000 is being sought for necessary pay.

PROGRAM - In July 1973, the Duplicating Section and the Photographic Services Division were combined to form the Office of Printing and Photographic Services. The supervision of the Government Printing Office's Smithsonian plant was also transferred from the Smithsonian Institution Press to the new office. This action combined the in-house reproduction capabilities with the photographic services. The new office offers the following types of support: hot metal letter-press printing, plate making and duplicating, microfilming, photographic copy and restoration, microphotography, macrophotography, catalogue photography, studio and field location assignments, motion picture photography, color and black and white processing, black and white photographic printing, slides and transparency duplication and processing, and exhibits and mural photographs.

Photography production figures for calendar year 1973 are up over calendar year 1972 in the Office of Printing and Photographic Services by the following amounts:

	1972	1973
Total number of jobs requested	7,500	8,000
Studio and location assignments	1,750	1,930
New negatives (including copy negs)	50,000	65,000
Microfilm	500,000	850,000
Black and white prints	200,000	215,000
Color prints	5,000	6,000
Slides and transparencies	30,000	80,000

JUSTIFICATION OF $61,000 INCREASE:

Photography - The requested FY 1975 increase will be used: (1) to satisfy the many additional requests for support to projects underway and proposed for the Bicentennial; (2) to fulfill requests for the preparation of slides and lectures for educational purposes; (3) to supply photographs for publication and student research projects; (4) to continue preservation of some 30 million valuable documents through the microfilming process; and (5) to relieve the scientists of photographic work, therefore, allowing them more time for their normal research and scientific duties.

There is currently one technician capable of processing color photographs although all the photographers take such pictures. In-house color processing is limited to film 4 inches by 5 inches, and all other color work must be contracted. In the next several months, equipment necessary to process 35mm slides will be installed. A new technician ($11,000) is required to assist in the operation of the color processing equipment.

There are currently two microfilm technicians who are capable of producing 850,000 microfilm negatives per year. With a new microfilm operator ($8,000) and supplies ($4,000), this production could be expected to go up to 1,275,000. Even at this rate it will take 23 years to microfilm the 30,000,000 documents already on hand that are considered of legal or historical value.

Most of the photographic assignments are carried out in the photographic studios located in the major exhibition buildings, as standard museum practice does not allow valuable specimens to be moved out of the building to other locations. This is to prevent deterioration by improper handling, changes in environment, or loss. There are three photographic studios under the jurisdiction of this office. One is located in the History and Technology Laboratory, one in the Natural History Building, and one in the Arts and Industries Building. There are currently three studio photographers. An additional photographer ($11,000) is requested to be assigned to studio work to keep the laboratories operational during vacations and to provide for peak work loads.

Photography is an integral part of some scientific work. In order to relieve the scientists of this work and to add the photographic expertise, a scientific photographer ($16,000) is requested. In one bureau it is estimated that 8 man-years were spent by the scientists doing scientific photography in connection with their research studies. Not all this work can be performed by a photographer, but much of it could be accomplished if another photographer were available.

Printing and Reproduction - The Smithsonian Institution currently has two types of in-house printing capability--linotype and duplicating. The linotype presses and printers are provided by the Government Printing Office on a reimbursable basis. The duplicating of official memoranda, budget justifications, some leaflets, and news releases is accomplished in the duplication section. An additional multilith operator ($8,000) with support funds of $3,000 is requested to enable this unit to respond to requests from all Smithsonian offices and bureaus.

INFORMATION SYSTEMS DIVISION

1973 Actual..... $319,000
1974 Estimate..... $381,000
1975 Estimate..... $463,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	18	4	22
11 Personnel Compensation.....	331	65	396
12 Personnel Benefits.....	27	5	32
21 Travel & Trans. of Persons..	1	1	2
23 Rent, Comm. & Utilities.....	9	3	12
25 Other Services.....	8	6	14
26 Supplies and Materials.....	3		3
31 Equipment.....	2	2	4
TOTAL	381	82	463
Analysis of Increase			
Necessary Pay.....		11	
Support Funds.....		71	

ABSTRACT - Computer specialists, mathematicians, and support personnel of the Information Systems Division (ISD) participate in the development and application of mathematical techniques such as statistical analysis, mathematical modeling, data reduction and cluster analysis, for research projects and automated administrative and collections management systems. An increase of 4 positions and $71,000 is requested in FY 1975 to meet the following support needs: (1) one additional mathematician ($16,000) and support funds ($3,000) to meet an increasing demand for mathematical and statistical analysis assistance by curators and researchers in the areas of historical, biological, chemical, and geological research; and (2) two computer specialists and 1 software specialist ($42,000) and support funds ($10,000) to permit continued development of the SELGEM system, including user procedures and systems documentation, for current and projected needs. An additional amount of $11,000 is requested for necessary pay.

PROGRAM - The ISD was established in 1966 so that the Institution could take advantage of computer technology. Computer specialists, mathematicians, and support personnel work with curators, historians, scientists, and management personnel to apply mathematical techniques to research problems and to develop automated administrative and collection management systems. Initially, the Division's work concentrated largely on management support functions. Over the past four years, however, approximately 75% of the Division's resources have been expended in support of research and collection management as a better understanding of the computer's potential has evolved. Work by ISD has contributed to producing data that have been or will be published in approximately 80 scientific publications.

Presently scientific and collections management computer programs are being developed that can be utilized in several areas with minor modifications to reduce development costs. The Division maintains a computer program library containing 350 active programs and is currently serving researchers, curators, and administrators throughout the Institution. The SELGEM (Self-Generating Master) system has been distributed to 23 universities, government agencies, and other museums. Placing a minimal value for the system to a user of $30,000 indicates assistance valued at about $700,000 has been provided to external organizations doing research or collections management in various areas.

JUSTIFICATION OF $71,000 INCREASE (Automatic Data Processing)

Scientific Research Applications - An increasing demand for mathematical and statistical analysis assistance by curators and researchers in the areas of historical, biological, chemical, and geological research has placed current resources under a constant strain. Seven departments in the National Museum of Natural History (NMNH) and 10 other bureaus are major users of these resources. Projects vary from the application of mathematical/statistical techniques to solve day-to-day research needs, to reducing large quantities of data from the electron microprobe equipment, to portraying research information in a graphic form.

Based on an accumulation of data from weekly status reports and customer correspondence/contact, it is estimated that a mathematician can complete approximately two mathematical projects per month. Present staffing includes one manager and two mathematicians. It is estimated they will be able to complete 72 projects in FY 1974, resulting in a backlog of approximately 40 projects. (Backlogged projects will include mathematical assistance to scientists doing ecological research at the Chesapeake Bay Center, animal behavior analysis for the National Zoological Park, taxonomic classification studies, and programmed research for the various departments in NMNH.) Eighty-three new projects will be developed in FY 1975. Additional staffing of one mathematician ($16,000) and support funds of $3,000 for equipment, supplies, training, and computer time will reduce the projected FY 1975 backlog to 27 projects.

Collections Management Workload - In FY 1975 the Smithsonian's main Collection Management System, (SELGEM), which has aroused interest throughout the museum world for its potential as a standard for the computerized management of collections, will be developed further and applied throughout the various museums to provide automated retrieval and indexing of data pertaining to the national collections. Expected results will benefit the professional staff by providing catalogues, cross-referencing indices by categories, better inventory control, and a future vehicle for responding to non-technical queries by the general public. Automated files now permit curators, researchers, and scientists to analyze and interpret their data in ways that were impossible with manual files. The system also allows for economical means of exchanging data via magnetic tape without physically transporting specimens or visiting other locations.

Presently a staff of 4 computer specialists devotes full time to systems analysis, computer programming maintenance, documentation, and customer liaison in the collections management area. In FY 1974 such work has been requested for 30 different collections, and in FY 1975 it is predicted that work will be started on 40 new collections.

From past experience it is estimated that 30 to 35 percent of a computer specialist's time is devoted to continued maintenance and liaison once a project is considered in production. Presently 93 various collections have been automated in the science, history, and art areas, and 40,000 to 45,000 records are entered monthly into various collection management systems. By FY 1977 it is estimated 90,000 to 95,000 records will be entered monthly. All items in the National Collections will not be automated and initial preference is being given to those areas which are considered more important for research and/or historical purposes.

During FY 1974 no new SELGEM program development can be provided and program maintenance capability will be one-half of the requirement for the system which will result in a one and one-half man-year backlog. User procedures and systems and programming documentation equivalent to one-half man-year are also being delayed. Staff resources previously assigned to this area are now assisting individual curators with current needs. The administrative application area which includes all other areas using ADP, such as payroll, personnel, accounting, library, and supply continue to expand as the Institution grows and no resources can be diverted from this area. For FY 1975, in addition to the 2 man-year SELGEM backlog, approximately 14 new collections will have to be delayed. Staffing of 2 additional computer specialists

and 1 software specialist ($42,000) and support funds of $10,000 for equipment, supplies, training, and computer time, will be required in FY 1975 to reduce this growing backlog.

SUPPLY DIVISION

1973 Actual.....$392,000
1974 Estimate.....$450,000
1975 Estimate.....$503,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	23	2	25
11 Personnel Compensation.....	300	28	328
12 Personnel Benefits.....	26	2	28
21 Travel & Trans. of Persons..	2		2
23 Rent, Comm. & Utilities.....	10		10
25 Other Services.....	17		17
26 Supplies and Materials.....	90	23	113
31 Equipment.....	5		5
TOTAL	450	53	503
Analysis of Increase			
Necessary Pay.....		13	
Support Funds.....		40	

ABSTRACT - The Supply Division is responsible for procuring supplies, materials, contractual services, and equipment for research, curatorial, exhibit preparation, and other Smithsonian activities. In order to respond effectively to overall growth within the Institution, an increase for General Administration of two stock/property clerks ($17,000) and $23,000 for stockroom supplies is requested. An additional $13,000 is being sought for necessary pay.

PROGRAM - The Supply Division procures supplies, materials, contractual services, and equipment for research, curatorial, exhibit preparation, and other Smithsonian activities. It stocks and issues office, laboratory, and other supplies required in daily management operations. It operates a property management program, obtaining excess property in lieu of new procurement whenever possible. The Division maintains property records and requires periodic inventories to insure adequate control and utilization of equipment items.

JUSTIFICATION OF $40,000 INCREASE (General Administration) - The Division's workload of purchase orders, contracts, imprest fund uses, and other transactions associated with operating funds and construction projects continues to increase with the overall growth in Smithsonian programs. Property management and supply requirements will soon be further increased by equipping the new National Air and Space Museum. To maintain an effective level of efficiency, an increase of two stock/property clerks ($17,000) is requested.

The Supply Division maintains a central stock room. Office and laboratory supplies that are common to most offices of the Institution are stocked for issue to requesters. Although this arrangement permits economy through bulk purchasing, the Division's ability to sustain needed inventory is continually eroded by steadily rising costs--a situation which is further aggravated by the increasing size and complexity of the Institution's operations. An increase of $23,000 for the purchase of supplies is requested to permit the maintenance of an adequate inventory.

MANAGEMENT ANALYSIS OFFICE

1973 Actual.....$192,000
1974 Estimate.....$203,000
1975 Estimate.....$225,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	11	1	12
11 Personnel Compensation.....	174	20	194
12 Personnel Benefits.....	14	2	16
21 Travel & Trans. of Persons..	1		1
23 Rent, Comm. & Utilities.....	1		1
24 Printing and Reproduction...	1		1
25 Other Services.....	7		7
26 Supplies and Materials.....	1		1
31 Equipment.....	4		4
TOTAL	203	22	225
Analysis of Increase			
Necessary Pay.....		7	
Support Funds.....		15	

ABSTRACT - The Management Analysis Office (MAO) performs a wide range of general management staff assistance and advisory services related to museum, research, and support operations in the Smithsonian. In order to meet the increased workload caused by the growth of the Institution, one additional management analyst is requested in FY 1975 at a cost of $15,000. Necessary pay in the amount of $7,000 is also sought.

PROGRAM - MAO performs management studies and analyses. It develops, recommends, and implements effective business administration and management improvement programs. It provides management advisory services; makes studies and special surveys; develops organizational, functional, staffing, and flow charts; prepares procedural manuals; and manages administrative issuances and forms management programs.

JUSTIFICATION OF $15,000 INCREASE (General Administration) - The MAO operates along the following functional lines: management analysis, forms control, and administrative issuances. Three employees are involved in the design, production, and control of forms. Many new forms are proposed each year. These are consolidated whenever possible. The use of computers has added greatly to the complexity of forms. Two employees are responsible for the issuance of directives and announcements. These employees are also responsible for editing agency material in the Catalog of Federal Domestic Assistance, and other Government publications. The balance of the staff is available for management studies. In FY 1974 this staff is expected to complete and issue the following handbooks: Purchasing; Time and Attendance; Correspondence; and Travel. They will also be working with the Photographic and Printing Services division on developing production reports, with the Office of Plant Services on an authorization of motor vehicle use for official business, and with Protection Services on a self-defense plan for guards. But with this limited staff some management studies and surveys are backlogged, such as studies and analyses of Smithsonian's current system of delegation of authority, requisitioning procedures for printing and duplicating services, and acquiring and using photo-duplicating equipment. An additional analyst is needed to help to eliminate this backlog ($15,000).

OFFICE OF PROTECTION SERVICES

1973 Actual.....$3,965,000
1974 Estimate.....$4,415,000
1975 Estimate.....$5,363,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	400	82	482
11 Personnel Compensation.....	3,847	706	4,553
12 Personnel Benefits.....	327	61	388
21 Travel & Trans. of Persons..	5		5
23 Rent, Comm. & Utilities.....	3		3
24 Printing and Reproduction...	3		3
25 Other Services.....	202	79	281
26 Supplies and Materials.....	21	57	78
31 Equipment.....	7	45	52
TOTAL	4,415	948	5,363
Analysis of Increase			
Necessary Pay.....		209	
Support Funds.....		739	

ABSTRACT - The Office of Protection Services (OPS) is responsible for the protection, security, health, and safety functions of the Institution. An increase of $739,000 and 82 positions is requested to enable this office to fulfill its responsibilities in six major areas. These areas are: (1) National Air and Space Museum - 30 guards ($63,000) and support funds of $39,000 to provide adequate security during initial occupancy; (2) Health Program - a full-time medical officer and a nurse ($36,000) to meet needs occasioned by rising visitor levels; (3) Plainclothes Operations - 13 additional positions ($118,000) to increase crime deterrence in the major museums and assist in criminal investigations; (4) Overall Protection and Support - 33 positions ($287,000), including 10 supervisors, 22 guards, and 1 training officer, and support funds of $78,000 to provide adequate protection coverage for new exhibitions and facilities; (5) Fire Prevention and Inspection - 3 positions ($41,000), a fire safety engineer and 2 fire inspectors, to provide a comprehensive program of fire safety engineering and safety inspections; and (6) Burglar and Fire Protection and Detection Systems - an electronics technician ($13,000) to service and maintain electronic protection and detection equipment and $64,000 for a phased conversion from the use of leased systems to Institution-owned systems. Funding for necessary pay of $209,000 is also requested.

PROGRAM - OPS is responsible for the protection, security, health, and safety functions of the Institution. The present protection staff of 360 guards and guard supervisors provides physical security for the Smithsonian museums, art galleries, warehouses, and the property housed therein (excluding the National Zoo which has its its own police force). A recent action taken to increase responsiveness to the guarding of collections is the assignment of the elevator operators to this office. The responsibility of the operators is very important to internal security since, in almost every instance, access to the upper, non-public levels of the museums is only by elevators. The doors on stair landings are locked with access only from within the floors, not from the landings.

The protection and security of the Smithsonian's collections, exhibits, facilities, visitors, and staff are of high priority. Additional guard coverage in calendar year 1973 has enabled the force to be more responsive, resulting in a decrease in the crime-rate growth experienced in previous years. The number of misdemeanors and

felonious incidents increased in 1973 to 293. This represents an increase of 61 as compared to the increase of the previous year of 110. The percentage of recovery of stolen articles rose from 20 percent to nearly 50 percent; 46 recoveries as compared to 143. The increase of misdemeanors and incidents can be attributed to such factors as the dramatic growth in the number of visitors; the increased scope, variety and value of the exhibits; and the mounting volume of collections.

The health and safety unit works closely with the guard force. Because of their accessibility the guards are first contacted when an accident, fire, or other incident occurs. Over 325 such incidents were handled last year. Vandalism (13 percent of total crime), truancy cases, and special non-criminal investigations are further examples of the kinds of incidents handled by the Protection division.

JUSTIFICATION OF $739,000 INCREASE (Protection):

National Air and Space Museum - The OPS will be required to assume responsibility for protecting the new National Air and Space Museum during the last quarter of FY 1975. The 30 positions (8 man-years) ($63,000) represent the initial guard increment required to protect the Museum. A total of 85 positions will be required when the Museum opens to the public in FY 1976. Support costs ($39,000) cover purchase and maintenance of uniforms, radio equipment, and setting up a security office in the Museum.

Health Programs - The Smithsonian currently employs a physician on a part-time contract basis. A full-time doctor and additional nurse ($32,000) are required to enable the Smithsonian to conduct a health program to serve staff and visitors who may become ill or injured. The new Hirshhorn Museum currently has space for a health facility which would also serve other buildings now on this side of the Mall. The funds requested here would provide one nurse; an additional part-time nurse could be employed with the funds currently being used to pay the part-time doctor. These nurses would be assigned to the Hirshhorn. Funds requested include equipping the space for a health unit ($4,000).

Plainclothes Operations - An experimental plainclothes squad (using existing guard employees) went into operation on July 1, 1973, with a six-man force. Scheduling was such that four officers were assigned daily to operate in each major facility. During this period, the squad was responsible for the apprehension of over 240 suspects on charges ranging from destruction of exhibit material to robbery and sex-related offenses. The plainclothes squad's mission is to deter visitor-related crimes. Proof of their success, stemming from the maneuverability of the force, lies in the reduction of robberies from 29 in the first six months of 1973 to 8 in the last six months. A study revealed that museum facilities were widely used as havens for area school truants. A program of identifying these juveniles and seeing that they are returned to their schools has contributed to a reduction of one-third (36 to 24) in public area larcenies during the squad's operational period.

In addition to regular assignments, plainclothesmen have provided security support for dignitaries requiring personal protection while touring Smithsonian facilities. Additionally, they have been instrumental in solving many reported offenses through preliminary investigations conducted at the crime scene. This is responsible in great part for the nearly 50 percent clearance rate in calendar year 1973. With the reluctance of visitors to cooperate in prosecutions and, in many cases, even to report an offense committed against them, a plainclothes operation is the only successful measure found to deter criminal acts. The 13 additional positions ($118,000) requested will enable ten men to be assigned to the major museums, including the Hirshhorn.

Overall Protection and Support - The guards in exhibition areas are subjected to many demands for attention. An independent consultant's report for the Smithsonian stated that guards were distracted by one out of every three visitors making inquiries or seeking directions. In addition, guard response to local alarms at exhibitions further reduces the area to which he can devote his full attention. Additional guards and guard supervisors and a training officer ($287,000) are necessary to provide adequate security for highly sensitive areas, such as the numismatic and mineralogy collections; new halls, galleries, and exhibitions which have recently opened or are to be opened to the public, such as, the two exhibits, "It All Depends" and "Ice Age Mammals and the Emergence of Man" in the Museum of Natural History, a gallery of portrait miniatures in the National Collection of Fine Arts, and the entire third floor mezzanine exhibit area of the National Portrait Gallery.

The number of guard posts required is determined by the value of the property exhibited or stored, the vulnerability to theft or vandalism, the effective field of vision of the guard, and the extent to which detection/protection devices are present. Of the 281 guard posts which have been determined, only 200 are currently being manned. The 81 unmanned guard posts are equivalent to 135 man-years. The 33 positions ($287,000) requested would help to narrow this difference. In addition support funding of $78,000 is sought for uniform and equipment purchases and maintenance, training aids, and contractual courses for guard training.

Fire Prevention and Inspection - A serious fire during FY 1973 at the Belmont Conference Center reinforced the need for a comprehensive program of fire safety engineering and safety inspections. Three positions and $41,000 are requested to fill this need. Currently, there is only one fire inspector to cover all the buildings of the Smithsonian. He only has time to check fire extinguishers and obvious problems. Capability is needed during the design stages for new major construction as well as for exhibition construction to ensure that fire safety aspects receive full consideration and implementation. Continuing fire safety inspections are necessary for facilities on or near the Mall and at such sites as Hillwood, Belmont Conference Center, Chesapeake Bay Center, and Anacostia Neighborhood Museum.

Burglar and Fire Protection and Detection Systems - The OPS has no internal capability for maintaining the electronic equipment and systems installed in the various Smithsonian locations. Maintenance and service personnel of outside companies must be relied upon, and response to service calls is not immediate. The cost of this outside maintenance amounted to nearly $175,000 in FY 1974. One additional position ($13,000) is requested for an electronics technician to service and maintain electronic protection and detection equipment. The support cost requested ($64,000) will be used for the first phase of the conversion from leased, externally-maintained equipment and systems, to an Institution-owned system with centralized control and reporting. This first phase will include the upgrading of communications systems equipment, the replacement of out-dated systems, and the consolidation of the various individual control rooms into one control center. It is expected that the conversion to a proprietary system would take five years. The initial experimental stages will enable the Institution to gather information on the total savings versus the cost of the change-over.

OFFICE OF FACILITIES PLANNING AND ENGINEERING SERVICES

1973 Actual.....$390,000
1974 Estimate.....$433,000
1975 Estimate.....$554,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	20	3	23
11 Personnel Compensation.....	381	41	422
12 Personnel Benefits.....	33	4	37
21 Travel & Trans. of Persons..	1	1	2
25 Other Services.....	13	75	88
26 Supplies and Materials.....	2		2
31 Equipment.....	3		3
TOTAL	433	121	554
Analysis of Increase			
Necessary Pay.....		10	
Support Funds.....		111	

ABSTRACT - The Office of Facilities Planning and Engineering Services (OFPES) is responsible for planning, design, coordination, and supervision of construction, modification, and repair work. An increase of 3 positions and $111,000 is sought for Building Management support. The positions and funds in the amount of $36,000 will provide for an engineer/estimator to assist in project development and cost estimating and 2 construction inspectors to oversee contract work. An amount of $75,000 is requested to continue program studies and to perform preliminary site planning for the National Museum Support Facility. An additional $10,000 is sought for necessary pay.

PROGRAM - OFPES is responsible for planning, architectural and engineering design and preparation of specifications, coordination, and supervision of construction projects. OFPES is a newly formed organization which was part of the Buildings Management Department. The separation of this unit from day-to-day responsibilities for operations of buildings enables more time and attention to be given to these specialized services.

JUSTIFICATION OF $111,000 INCREASE (Buildings and Facilities Management) - With the large number of buildings owned or occupied by the Smithsonian and with several buildings being over 75 years old, the range of repair, renovation, and rehabilitation projects is enormous. Examples of work currently underway are the air conditioning and renovating of the Arts and Industries Building (93 years old), library space in the Natural History Building, and preparation of space for conservation purposes in the History and Technology Building.

An engineer/estimator ($16,000) is needed to provide critical skills to the facilities planning process. No one currently on the staff is available to perform the critical job of estimating costs on a full-time basis. In order to prepare a realistic estimate of construction costs the estimator must keep up with various cost factors in the construction trade. With the difficulty of such projections at the best of times, in these times of rapid price increases it is especially difficult. This is a very important request in order to insure sufficient funds are requested for a particular job.

Two construction inspectors ($20,000) are needed to assist in overseeing the work being performed under contract. Currently there are 20 projects underway totaling $5 million. There are two inspectors currently on the staff, but because of the number of small jobs that are undertaken, additional personnel are requested. It is

not unusual for a large job, like the air conditioning of the Arts and Industries Building which will take two years, to require the full time of at least one inspector while the job is underway.

An appropriation of $75,000 is required to continue studies and site planning for the proposed Smithsonian National Museum Support Facility. In 1969 the Regents of the Smithsonian Institution recognized that the natural, but inevitable, growth of the national collections in science, history, and art had crowded the Mall museum buildings to the extent that public exhibition space was being used for the research collections and that, in spite of this, the collections were so crowded that research and the essential services provided by the collections were impeded. The Regents agreed that the development of a museum support facility was needed to maintain the use of the Mall buildings for public exhibition and public services, at least at the level for which they had been built.

The funds requested are required to continue the analysis of the essential museum functions which can be performed away from the central buildings, for the determination of priorities of need, and to make analyses and study plans for suitable government-owned land under consideration.

OFFICE OF PLANT SERVICES

1973 Actual.....$ 7,733,000
1974 Estimate.....$ 8,965,000
1975 Estimate.....$10,907,000

(Dollars in thousands)	Base FY 1974	Increase Requested	Est. FY 1975
Number of Permanent Positions..	529	85	614
11 Personnel Compensation.....	4,610	880	5,490
12 Personnel Benefits.....	390	73	463
21 Travel & Trans. of Persons..	4		4
23 Rent, Comm. & Utilities.....	2,480	907	3,387
24 Printing and Reproduction...	4		4
25 Other Services.....	872	10	882
26 Supplies and Materials.....	498	19	517
31 Equipment.....	107	53	160
TOTAL	8,965	1,942	10,907
Analysis of Increase			
Necessary Pay.....		412	
Other Uncontrollable.....		830	
Support Funds.....		700	

ABSTRACT - The Office of Plant Services (OPLANTS) provides essential services related to the physical maintenance and operations of nine major buildings as well as 26 smaller buildings or facilities located in the Washington, D. C. area.

In FY 1975 an increase of $700,000 is requested to meet the following support requirements in Buildings Management: (1) 31 positions, approximately 6 man-years, ($73,000) for initial staffing of the new National Air and Space Museum and funds in other objects ($120,000) for related expenses; (2) 44 positions ($377,000) are sought to bring the custodial and mechanical forces closer to their required strength, and support funds ($24,000) for supplies, contracts, and equipment; (3) 6 positions ($60,000) and support funds ($10,000) to extend the horticultural services program to the Hirshhorn Sculpture Garden and Courtyard, as well as adding to the core team who are responsible for 75 acres of grounds, plantings, and park areas; (4) 3 posi-

tions ($24,000) and a truck ($5,000) to establish an inter-building moving team; and (5) 1 position ($7,000) to extend the mail/messenger service to the new building. An amount of $412,000 is requested for necessary pay. An additional $830,000 for space rental is being requested in the Uncontrollable Section. (See page A-6.)

PROGRAM - OPLANTS is responsible for the day-to-day operation of the Smithsonian's physical plant located in the Washington, D. C. area. The range of services includes trade and craft assignments, custodial and labor services, operation of temperature and humidity control units, transportation, communications, minor repairs and alterations to buildings, moving and rigging services, landscaping and grounds maintenance, and mail/messenger service. OPLANTS employs trade and craft personnel such as masons, cabinetmakers, glaziers, painters, and electricians who contribute their skills in support of research activities, exhibitions, and other public events. The Buildings Management Department used to be responsible for other aspects of buildings' maintenance and operation, including their protection. In FY 1973, the Office of Protection Services was established to be responsible for protection and security of buildings. Further organizational changes have taken place to improve the effectiveness of operations and to make various buildings management-type functions more responsive to program requirements. For instance, the elevator operators have been placed under the jurisdiction of the Office of Protection Services to strengthen that office's ability to control access to non-public areas. Planning and design, engineering, architectural, and construction supervision functions have been concentrated in a new Office of Facilities Planning and Engineering Services to permit more effective development, review, and management of alteration, renovation, and construction projects. Custodial and labor forces, under the supervision of a building manager, have been assigned for administrative management to the museum and office directors that have immediate responsibility for the condition of their buildings which receive 15 million public visits each year, as well as use by employees, visiting researchers, and students. The museums and facilities affected are the National Museum of Natural History, National Museum of History and Technology, Fine Arts and Portrait Galleries, Freer Gallery of Art, Hirshhorn Museum and Sculpture Garden, National Air and Space Museum, Smithsonian and Arts and Industries Buildings, and several outlying areas occupied by the Smithsonian.

JUSTIFICATION OF $700,000 INCREASE:

National Air and Space Museum - The National Air and Space Museum is scheduled for occupancy in the latter part of FY 1975. Although the public opening will not be until July of 1976, many initial services must be provided by OPLANTS in FY 1975. They include the installation of special equipment; the operation and maintenance of heating, air-conditioning and humidity control systems; extensive moving and rigging services; and cleaning and labor services.

An initial staff of five mechanics, one electrician, and 25 custodians and laborers (about six man-years, $73,000) is sought to provide these essential services. Funds are also requested for related expenses such as utilities and communications, miscellaneous contract services, custodial supplies and materials, and cleaning and maintenance equipment ($120,000).

Custodial and Mechanical Maintenance - Custodial and labor personnel provide services for approximately 3,656,000 square feet of floor area. These employees provide many special services requested in connection with public activities and educational programs during regular hours, at night, and on weekends and holidays. Cleaning operations encompass collection areas, offices, restrooms, workrooms, laboratories, and exhibit areas. Primary consideration has been placed on cleaning public areas which comprise about 60 percent of the total net floor area. Work frequency rates are considerably higher in these public areas, and special care must be exercised because of valuable museum objects.

Cleaning standards have been developed which show manpower requirements to sustain adequate levels of performance. The financial resources required to bring a reasonable balance between workload requirements and staffing needs have fallen consistently short. Increased demands for services, including moves of furnishings, equipment, and collections and the addition of more exhibit areas, have strained the capability of existing custodial and labor forces. Some non-public areas requiring attention are being neglected because limited personnel must be diverted to public areas. In an effort to correct these growing deficiencies, $300,000 is sought for 37 positions. These will be used in the following buildings: National Museum of Natural History, 10; National Museum of History and Technology, 7; Fine Arts and Portrait Galleries, 8; Hirshhorn Museum, 6; and others, 6.

Additional air-conditioning, heating, and lighting systems for all Smithsonian buildings, as well as increasing numbers of visitors and exhibit spaces have resulted in greater demands on trade and craft personnel. Two additional electricians, three mechanics, and two painters will help insure preventive and corrective maintenance, and relieve backlog situations ($77,000). Support funds of $24,000 are requested for necessary supplies, increases in contractual services, and the replacement of irreparable equipment.

Horticultural Services - A horticultural program has recently been established which is intended to provide maintenance to 75 acres of grounds, planting, and park areas; development of a recording, labeling, and accessioning system; interior plantings, and development of a greenhouse operation to serve plant requirements. Additional demands will be levied by the Hirshhorn Sculpture Garden and Courtyard which is expected to open in the fall of 1974. This addition to the Smithsonian's museums will require a high degree of maintenance because of its public use. Intense efforts are underway to bring several projects to completion by 1976 to coincide with the Bicentennial. An additional 6 gardeners and helpers ($60,000) are requested plus funds necessary to acquire plant materials and equipment needed to sustain established projects ($10,000).

Establish Inter-Smithsonian Moving Force - The Smithsonian has no moving force with a truck for inter-Smithsonian movement of items from the national collections. A very unsatisfactory and potentially unsafe practice exists of moving valuable objects with separate labor crews in each museum and a separate truck and driver. A study by all Smithsonian museum registrars has established the need for a trained force as a high priority item for safe movement of collections. Two moving clerks and a driver ($24,000) and a truck ($5,000) are requested for this purpose.

Increase Mail Service to Accommodate Hirshhorn and Increased Demand - An increase of one mail clerk ($7,000) is requested to improve the pick up and delivery of mail to Smithsonian's offices on and away from the Mall.

MUSEUM PROGRAMS AND RELATED RESEARCH
(SPECIAL FOREIGN CURRENCY PROGRAM)

1973 Appropriation.....$3,500,000
1974 Appropriation.....$4,500,000
1975 Estimate.....$4,500,000

Equivalent in "Excess" Foreign Currencies

An appropriation of $4,500,000 in foreign currencies determined by the Treasury Department to be in "excess" of the normal needs of the United States is requested for FY 1975. The appropriation will be used for two general purposes:

1) To continue a program of grants to United States institutions for field research in those countries where "excess" local currencies are available. The research will be performed in the following general areas of Smithsonian Institution interest and competence:

Commitment of Funds by Program Area
(dollar equivalents)

	FY 1966-73 Cumulative Commitments	FY 1974 Estimated Commitments	FY 1975 Appropriation Request
Archeology and Related Disciplines	$11,376,429	$1,400,000	$1,300,000
Systematic and Environmental Biology	7,187,454	1,400,000	1,500,000
Astrophysics and Earth Sciences	1,126,284	500,000	450,000
Museum Programs	261,530	190,000	240,000
Grant Administration	110,807	10,000	10,000
	$20,062,504	$3,500,000	$3,500,000

2) To make the second of four annual payments, each of $1,000,000 equivalent in "excess" Egyptian pounds, which together would constitute the final United States' contribution to UNESCO's international campaign to preserve archeological monuments in Nubia which are inundated by Nile River waters regulated by the Aswan Dam. These payments would support the preservation of the monuments on the Island of Philae as proposed by President Kennedy in his letter to the Congress dated April 6, 1961.

THE PROGRAM OF GRANTS FOR FIELD RESEARCH

In fulfilling the first general purpose of this appropriation, the Smithsonian Foreign Currency Program has awarded 401 grants to United States institutions for field research totalling more than $20,000,000 equivalent in "excess" foreign currencies over an eight-year period. These grants have benefited 220 museum, universities, and research organizations in 32 states and the District of Columbia. Benefits include major additions to the study collections of more than 28 museums and universities in 18 states and the District of Columbia. The grants have resulted in 452 scientific publications.

Many Smithsonian "excess" foreign currency grants support research which contributes to United States national programs. Among these are the Department of the Interior's cooperative programs abroad under the Endangered Species Act of 1973, the

National Aeronautics and Space Administration's satellite tracking programs, the National Academy of Science's contribution to the International Biological Program, the national research particularly in systematic and environmental biology, and the Smithsonian-administered National Museum Act which is devoted to strengthening the museum profession in the United States.

In FY 1973 obligations for field research totalled about $3,700,000 equivalent in "excess" foreign currencies. In 1974 grants to support ongoing and new field research projects are expected to total about the same amount. As of January 15, 1974, $1,106,000 equivalent had already been obligated for field research. On that date awards totalling $1,569,000 equivalent remained unfunded and proposals totalling an additional $1,000,000 equivalent had been received.

An appropriation of $3,500,000 for field research is essential for FY 1975 to support ongoing research and unfunded awards and to meet the persistent demand for funds to support new and meritorious research by United States institutions in the "excess" foreign currency countries. Research proposals in preparation total at least 64. This level of activity continues in spite of the removal of Israel and Morocco from the list of "excess" currency countries and the expected removal of Yugoslavia in the course of FY 1974.

The continuing interest in joint research is reflected in increasing numbers of requests for guidance and assistance in the preparation of Proposals for research in Egypt, India, Pakistan, and Poland.

In Egypt, fresh interest in joint research is emerging, particularly in the biological sciences. Proposals for research in Egypt in all Smithsonian sponsored fields, pending or in preparation, number 17.

For India, proposals pending or in preparation number 67, up from 36 a year ago. The major share of these proposals is for research in the biological sciences. The recent successful conclusion of negotiations between the United States and India on use of the United States-owned rupees gives promise of renewed consideration by India of joint research proposals and of an increase in Smithsonian grants for research there in FY 1975.

Growing interest in research collaboration in Pakistan is contributing to the momentum of new proposals in preparation. Two new archeological excavations were carried out there this past summer. Eighteen major proposals in all fields of Smithsonian interest are known to be in preparation.

Interest in collaborative research in Poland continues also with 11 major research proposals in preparation. In addition, the exchange of individual scholars reached a new high of 47 during FY 1973, up from 18 the previous year.

No increase in the "excess" foreign currency appropriation is requested for FY 1975 because it is estimated that new proposals likely to be funded in FY 1975 will be offset by the removal of Yugoslavia from the Treasury Department's list of "excess" foreign currency countries and the successful conclusion of research in other countries.

"Excess" foreign currency appropriations are an advantageous and unique source of research monies. They do not require new appropriations of tax dollars and do not add significantly to the President's budget total because the Commodity Credit Corporation reduces its appropriation request by an amount equal to the amount of foreign currencies expended. Delay in the use of the "excess" accounts means continuing losses to the United States Treasury as these accounts lose value through inflation and devaluation. Such monies are especially advantageous as a source of funds for

essential United States research abroad which does not adversely affect the United States balance of payments.

OUTSTANDING PROJECTS

Outstanding results of projects receiving Smithsonian Foreign Currency Program support include:

1. Publication by Harvard University and the University of Iowa of the first volume of the Corpus of Ancient Mosaics of Tunisia making available to the public for the first time examples of these little known but outstanding, colorful and varied works of art of the Roman and Byzantine Empires.

2. Discovery by the University of Pennsylvania of remarkable information about the monotheism established by the Egyptian Pharoah Akhenaten in the 14th century B. C. This information is emerging as individual building blocks bearing fragments of narrative scenes from the walls of Akhenaten's temple at Karnak are reconstructed like a jigsaw puzzle with the aid of a computer. The temple was systematically disassembled by Akhenaten's religious opponents after his death.

3. Publication of the first part of a six-volume revision of the basic handbook on the tropical flora of Sri Lanka (Ceylon). This Smithsonian revision of Trimen's Handbook to the Flora of Ceylon, will correct, on the basis of modern scientific research, the nomenclature of the major kinds of tropical plants everywhere in the world. These plants were first described by the Swede, Linnaeus, who is considered the father of modern systematic botany, in the 18th Century using specimens from Ceylon. This revised Handbook will greatly facilitate botanical research in the tropics which rests on accurate identification of each plant.

4. Organization of symposia, under National Academy of Sciences auspices, from which analytical publications of the results of research carried out under the International Biological Program are prepared. Smithsonian support has contributed to these symposia leading to publications on grassland, forest, desert, and tundra ecosystems and on biological productivity on land and in the water.

5. Field research in Yugoslavia for the Smithsonian's Folklife Festival presentation on the Mall in 1973 of folk dancers and singers from that country together with dancers and singers from American communities of Yugoslav origin. This program was the first of many to be presented in successive summers to culminate in a major Bicentennial festival in 1976 honoring the folk traditions of the American people which survive from the lands of their forefathers.

FINAL U.S. CONTRIBUTION TO UNESCO'S NUBIAN MONUMENTS CAMPAIGN

The Smithsonian is seeking a continued appropriation of $1,000,000 equivalent in excess Egyptian pounds, in addition to the $3,500,000 equivalent requested for grants for field research, as the second of four equal payments which together constitute the final United States' contribution to UNESCO's international campaign to preserve the temples on the Island of Philae.

The first payment of $1,000,000 equivalent in Egyptian pounds for this purpose which was appropiated to the Smithsonian in FY 1974 was announced on November 16, 1973 by the United States representative at the twenty-second meeting of the Executive Committee for the UNESCO International Campaign for the Safeguarding of the Nubian Monuments.

The total cost of this salvage program will probably exceed $16 million in convertible and local currencies. Some $10 million of this total has already been

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pledged by other nations including Egypt which has undertaken to meet one-third of the project's cost.

The salvage plan finally adopted by UNESCO's international advisory group, with the advice and concurrence of an American engineer, provides for a coffer dam to be erected around the Island of Philae to permit the lowering of the water for removal of the temples. They are then to be re-erected on the nearby Island of Agilkia in a setting like the original one. There they will be higher and safe from further erosion by the river and accessible to all.

Work has progressed satisfactorily on the salvage of the temples. The United States representative attending the first meeting of the Group of Archeologists and Landscape Architects for Safeguarding the Philae Temples in October 1973 at Aswan, Egypt, has reported that the work on the coffer dam was about 75 percent complete at that time. Preparation of the new site for the temples on the Island of Agilkia was more than 65 percent complete. Moreover, plans for the transfer of the temples to the new site revealed careful attention to preparation of the new site and to re-erecting the temples on that site in a manner nearly identical to that on the Island of Philae. The next meeting of the Philae salvage advisory group has been scheduled for April 1974 to coincide with the completion of the coffer dam and the lowering of the water covering the Island of Philae which will permit the start of the dismantling of the temples.

It is in the United States' interest to contribute to the preservation of the Temples of Philae because of their interest to the scholars of the United States. Moreover, by continuing cooperation in the Nubian Monuments Campaign, we maintain today's rich opportunities for American institutions of higher learning to conduct studies in Egypt and we enhance United States' cultural relations with that country. In response to Public Law 86-472, President Kennedy said in his letter of April 6, 1961, to the Congress that he considered it "to be in the interest of the United States to assist in rescuing these historic remains of a former civilization from destruction--and to join the international effort to conduct exploration and research in the threatened area of Nubia before it is submerged for all time." Today, in times of political unrest, the Smithsonian's request for funds to complete the United States' contribution to this international campaign takes on even greater significance in maintaining the basic cultural associations which are the most enduring form of contact between nations. In this context, the United States has already received the priceless Temple of Dendur from Egypt in appreciation for our Nubian Campaign support.

SMITHSONIAN PROGRAM PROCEDURES

This Special Foreign Currency Program appropriation request, as in the past, is based on budget projections for ongoing research and on pending and new research proposals which include firm research proposals, those postponed by lack of sufficient funds, and other sample or illustrative proposals based on firm indications of interest both within and without the Smithsonian. They represent the Institution's selection of possible projects which appear most promising for successful development and implementation during fiscal year 1975. A list of such projects is submitted as a supplement to the Smithsonian's fiscal year 1975 budget request. It should be noted, however, that actual implementation of these projects will be contingent upon three factors: review by the Smithsonian's national scientific advisory councils, review and approval by American embassies overseas, and appropriate cooperative arrangements with host-country institutions or governmental authorities.

MUSEUM PROGRAMS AND RELATED RESEARCH

(SPECIAL FOREIGN CURRENCY PROGRAM)

Commitments of funds by Country

	FY 1973 Actual	FY 1974 Estimate	FY 1975 Appropriation Request
Burma	0	$12,000	$12,000
Egypt	$852,000	1,387,000 /1	1,862,000 /1
Guinea	0	2,000	8,000
India	1,440,000	1,238,000	976,000
Morocco	183,000	0	0
Pakistan	71,000	363,000	427,000
Poland	255,000	317,000	538,000
Tunisia	524,000	699,000	677,000
Yugoslavia	392,000	482,000	0
	$3,717,000	$4,500,000	$4,500,000

/1 Includes payment to UNESCO of $1,000,000 equivalent in excess Egyptian pounds for the international campaign to preserve the Nubian monuments.

CONSTRUCTION, RESTORATION, REPAIR,

AND IMPROVEMENTS

SMITHSONIAN INSTITUTION CURRENT BUILDING PROGRAM

Project	Appropriated to Date	Fiscal Year 1975 Request
Construction and Improvements, National Zoological Park	$13,368,000	$10,000,000 1/
Restoration and Renovation of Buildings	14,957,000	1,325,000 2/
Construction:		
Hirshhorn Museum and Sculpture Garden	15,000,000 3/	...
National Air and Space Museum	31,900,000	10,000,000 4/

1/ Construction of the Elephant House and Bird House environs, planning and initial construction phases of the general service and parking facility, construction of the education and administration building, planning of future projects, and building and facilities repairs.

2/ Mt. Hopkins Observatory, Animal Conservation Center, Arts and Industries Building, Smithsonian South Yard, and other repairs and improvements to buildings and facilities.

3/ Excludes $200,000 for relocation of the Armed Forces Institute of Pathology and $1,000,000 provided by Joseph H. Hirshhorn for construction.

4/ Appropriation to liquidate contract authority.

CONSTRUCTION AND IMPROVEMENTS, NATIONAL ZOOLOGICAL PARK

1973 Appropriation.....$ 675,000
1974 Appropriation.....$ 3,790,000
1975 Estimate.....$10,000,000

This account is used to fund repairs, alterations, and improvements to existing facilities including exhibits; to plan and design facilities; and to perform major renovations, restorations, and new construction implementing the Master Plan approved by the Commission of Fine Arts and the National Capital Planning Commission in FY 1973. The requested appropriation of $10,000,000 will be used as follows: construction of the Elephant House and Bird House environs ($2,970,000); planning and the initial construction phases of the general service and parking facility ($2,730,000); construction of the education and administration building ($3,000,000); planning of future projects ($650,000); and renovation and repair of existing facilities ($650,000).

The Need

The National Zoological Park must be rebuilt in its tracks. The need has been acknowledged by the Congress and has been reflected in its actions in the past several years in funding a complete and revised Master Plan for the Zoo which has been approved by the National Capital Planning Commission and the Commission of Fine Arts.

In 1890, the Olmsteds were commissioned to prepare a park plan for the National Zoo catering to horse and carriage drive-throughs, and leisurely strolls by a small number of visitors. Today many of those same paths and roadways must bear vastly greater volumes of visitors, while vehicles have consumed acreage invaluable for educational and animal management uses.

In 1890, and continuing through the first half of this century, the National Zoo, along with most others, designed animal structures to serve the "Menagerie" mentality of eras past. Animals were curiosities to be caged, usually in isolation because it was not understood how to let them live together. A typical zoo put an animal in a bare cell; gave feed to it; and when it died (as often happened), replenished it from the wild. Today we must respect and use the animal as an educational resource, provide for its psychological and physiological needs, protect its gene pool through selective cooperative breeding programs, and sustain it in good health for a full and useful life demonstrating to man the character and abilities of its own kind.

Such improved quality of care and interpretation requires increasing knowledge and operational use of such knowledge, greater staff and new expertise, effective and complex plant management, different and better foods, collaborative interaction of animal management, interpretation, animal health and pathology, and research on-site and in the field. And above all, it requires space in the right amounts, the right place and the right design--for animals, for people, and for all their essential interrelated support, service, and access needs.

That is what the National Zoo Master Plan is all about--skipping a century to meet today's and tomorrow's challenge in the face of constant and increasing use by a public tuned in to animal ecology and environmental needs (20 percent increase in visitors in 1973 over 1971), obsolescence and decay of old structures, imperative new animal space needs, recurrent flood damage to some service facilities, and overuse of others. We have no choice but to rebuild. The mandate is to rebuild for today and tomorrow rather than replicating yesterday's mistakes.

The Master Plan provides more spacious quarters, as well as suitable dens, nest boxes, privacy areas, and special quarters for pregnant females, mothers and young,

and animals receiving medical care and, consequently, many more windows of educational opportunities for the public.

The Master Plan consists of fourteen clusters of forty-one closely interrelated projects, largely fixed in their necessary sequence. To be realized successfully, the Plan must unfold within a definite time-frame for the well-being of the animals and for the enlightenment of and least cost to the public.

Funds have already been applied to accomplish several major features of construction including delicate hoofed stock, pandas, monkey house remodeling, lion hill construction, and for schematic planning for elephant yards, bird house area, Connecticut Avenue education building, and for the vital central service and parking facility.

FY 1975 Program

The requested $10,000,000 appropriation will be used for the following projects:

1. Construction of Elephant House and Bird House Environs ($2,970,000)

Funding of $2,970,000 is required to complete construction of the new outside animal paddocks at the elephant house, and the plaza surrounding the bird house. Construction plans are presently being completed for the visitor sidewalks, service facilities, moats, pools, and yards surrounding the present elephant house, increasing the space for the animals by at least two-thirds. Viewing and educational facilities for the visitors will be greatly enhanced by means of elevated sidewalks, rest areas, special educational graphics, and wider sidewalks, and increased linear perimeter viewing to accommodate the ever-increasing numbers of visitors. Initially, the exhibition will include giraffes, Asian elephants, African elephants, Nile hippopotamuses, pygmy hippopotamuses, and the Indian rhinoceros. At a later date, the giraffes will move to another exhibit area with even larger yard space and the rhinoceroses into the area the giraffes had occupied. The animals will be separated from the public by pools, by dry moats, and, in the case of the giraffes, by a combination of moats and railings.

Plans for the five-acre plaza surrounding the bird house include complete redevelopment for exhibition and education. Pools and ponds for waterfowl and flamingos, crane yards, and flight cages will be presented in a park-like atmosphere appropriately landscaped with trees, shrubs, and grasses. A water bird exhibit will form an informal, pleasant approach to the building and the main feature in the rear will be the pond and yards for the flamingos.

Construction will start early in FY 1975 and both projects will be finished in time for the Nation's Bicentennial. With the completion of these projects, the monkey house, and lion hill (as well as the already completed bird house, flight cage, deer yards, hoofed-stock yards, and panda house), the Zoo will make a respectable showing for six million current visitors plus the many more anticipated between now and completion of the Bicentennial year.

2. Planning and Initial Construction of General Service and Parking Facilities ($2,730,000)

An amount of $2,730,000 is required to complete the working drawings on three interlocking phases of the general service and parking facility and initiation of site and foundation work. The $300,000 appropriated in the present fiscal year has begun these plans. The requested funds would place the Zoo in a position to advance construction efficiently on the initial phases of this project, hoping for significant occupancy in part by FY 1977. This particular project is pivotal to the entire construction program. It organizes not only the visitor parking but centralizes all non-animal related functions of the Zoo--operation and maintenance, gardening, commissary, motor pool, supply, protective services, etc. It frees, for park land and

animal exhibition, approximately twelve acres now used for parking and roadways. And it accomplishes critically necessary Rock Creek flood control protection for the Park in a plan carefully coordinated with all necessary neighboring and planning jurisdictions. Twice in as many years, Zoo work areas have been inundated by flooding. The service facility will incorporate civil engineering safeguards in order to alleviate this serious problem.

At the present time the Zoo, through the Friends of the National Zoo, is collecting a dollar parking fee for each visitor's car. Twenty-five percent of the profit is being used for the educational program at the Zoo, and seventy-five percent is being held in escrow for use in construction of the portion of the building related to visitor parking, just as user fees will defray operating costs after construction.

3. Construction of the Education and Administration Building ($3,000,000)

An appropriation of $3,000,000 will be used in association with a likely $1,500,000 from a private foundation for the completion of plans and construction of the educational building at the Connecticut Avenue entrance to the Zoo. This building will play a role in furthering humane education programs--an aim long advocated by the Zoo. This is an example of efforts to augment Federal support for the Zoo construction program by cooperative efforts with the private sector.

The building will contain educational program facilities centered around an auditorium equipped for both live and audio-visual presentations. It will be used as an introduction-orientation center for the Zoo. Several classrooms will be available to school systems. In addition, this building will house the administrative offices and library. Plans presently in the initial stages will be completed and construction started in mid-FY 1975. Construction may be completed in time for the Bicentennial.

4. Planning ($650,000)

Initial planning for future phases will be started in FY 1975, developing them in an interlocking scheme with present work and future construction phasing. These initial planning efforts are important to later well-developed plans and cost estimates for budget presentations and to insure the "meshing" of various projects with each other. Since the Zoo will stay open to the visiting public and the Bicentennial year will arrive during the construction, it must proceed with the first phases of plans in FY 1974 to insure that work is completed in an orderly, logical fashion with the minimum inconvenience to visitors.

The planning funds will be used for the following projects:

--$70,000 for the first phase of planning for the polar bears and the center of the Zoo to include the present small mammal building, the crocodile and Komodo dragon exhibit, new small primate building, and the monkey island.

--$80,000 for the first phase of planning and cost estimate of exhibits for the sea lions and seals--both above and underwater viewing--the beaver, the otter, and other related animals in the valley now most prominently identified by the present sea lion pool.

--$100,000 for the first phase of planning for the giraffe complex, redevelopment for animal use of the lower parking lots, rehabilitation of the duck ponds, and the lesser cat exhibit. This area, which extends from the lower one-third of Olmsted Walk eastward to Rock Creek, is now occupied by the Police Station, restaurant, duck ponds, and parking lots. The giraffes will be the central feature here, with a large outdoor yard where they will have ample room to move about and display their marvelous mobility. One pool will be added among the duck ponds which will contain a gibbon island. This

area will also include exhibition pens for the medium-size and smaller cats and a small flat space, now used for a parking lot, will be devoted to hoofed-stock, principally antelope.

--$400,000 for the completion of phase II planning documents for the lower Rock Creek area to include the bears, goats, sheep, and baboon exhibit in the old rock quarry and the great ape exhibit at the lower end of the Zoo property in Rock Creek. Phase I tentative plans are being worked on now.

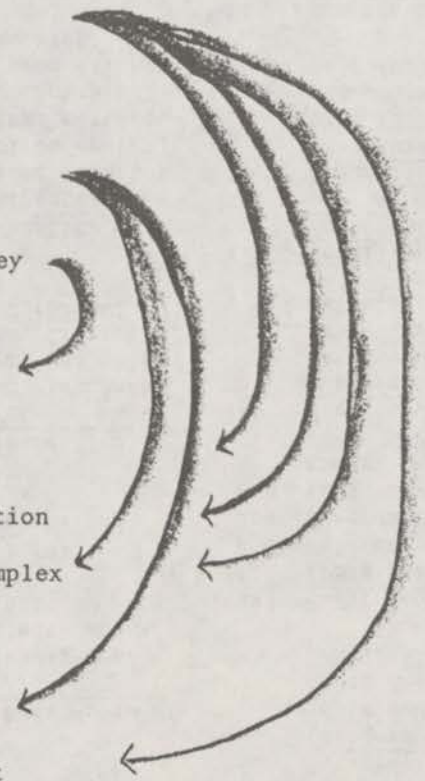
With the completion of these plans, the main exhibits in the central and lower parts of the Zoo will be sufficiently developed for more integrated construction phasing and more accurate cost estimation.

5. Renovation and Repair ($650,000)

An amount of $650,000 is needed for the continuing renovation and repair of the heavily used facilities of the present Zoo, taking into consideration the phased development of the whole Zoo. This includes such things as necessary repairs to roofs, utilities, walks, guardrails, fencing, access traffic flow, and the minimal repair and maintenance of heavily visited exhibits until they are replaced in the Master Plan.

NATIONAL ZOOLOGICAL PARK MASTER PLAN SCHEDULE

	Fourteen Complexes[1] (Forty-one projects)	Necessary Completion Sequence	Target Dates[2] (Bicentennial: *)	Future Estimated[3] Funding Needs	(,000's)
I	Monkey House, Puma House, Panda House		* Completion '75	Funded	
II	Lion and Tiger Hill		* Completion '76	Funded	
III	Elephant Yards and Bird House Plaza		* Completion '76	Planning funded Construction '75	 2,970
IV	General Services and Parking Facility		Planning- site work '75 1st occupancy '77 Completion '78	Schematics funded Planning '75 Budget authority '76 Budget authority '77 Budget authority '78	 2,730 7,200 4,970 4,700
V	Education and Visitor Center		* Completion '76	Construction '75 (1,500 donation)	3,000
VI	Lower Rock Creek Valley		Completion '79	Schematics funded	10,670
VII	Beaver Valley		Completion '79	Schematics '75	10,430
VIII	Polar Bear Complex		Completion '80	Schematics '75	11,910
IX	Giraffe Complex		Completion '80	Schematics '75	10,000
X	Reptile House and Elephant House Renovation		Completion '80		2,500
XI	Connecticut Avenue Complex		Completion '81	(2,500 est. private participation)	6,100
XII	Manatee Complex		Completion '81		6,000
XIII	Holt House Area		Completion '82		2,000
XIV	North Road Development		Completion '83		14,000
					$99,180



NOTES

[1]Project Composition

I Monkey House (1), Puma House (2), Panda House (3)
(14 species of monkeys, small and medium cats, giant pandas and assorted species)

II Lion and Tiger Hill (4)
(Pride of lions, yellow and white tigers)

III Elephant Yards (5) and Bird House Plaza (6)
(African and Indian elephants, Indian rhinos, pygmy and Nile hippos; crane yards, flamingos, 15 rearing yards, waterfowl ponds, pens)

IV General Services Facility (7)
(1500 visitor cars; total central support services: visitor health, safety, police center, commissary, buildings service shops, motor pool, central lockers, exhibits production, central supply, trackless trains service)

V Education and Visitor Center (8)
(Education and visitor services, school group staging area, administration and conservation offices, volunteer and guide services; Humane Society)

VI Lower Rock Creek Valley
(Bears (9), sheep and goats (10), baboon quarry (11), primate house (12), maned wolf (13), trackless train junction to METRO (14))

VII Beaver Valley
(Beavers (15), wolves (16), seals and sea lions (17), North American otters (18), penguins (19))

VIII Polar Bear Complex
(Polar bears (20), Small Mammals House renovation (21), crocodiles and komodo dragon (22), new monkey house (23), monkey island (24))

IX Giraffe Complex
(Giraffe house and yards (25), main waterfowl pond renovation (26), lesser cats (27), plains animals (28))

X Reptile House (29) and Elephant House (30) Renovation

XI Connecticut Avenue Complex
(Restaurant and cafeteria, gift shop (31), main entrance gate and plaza, North American animals (32), parking extension)

XII Manatee Complex
(Manatee river bank scene (33), kiwi (34), sea otters (35), platypus (36), hawks and owls (37))

XIII Holt House Area
(Holt House renovation, green house development (38), research and health holding areas, animal nursery (39))

XIV North Road Development
(North road parking, Klingle Bridge (40), large plains animals (41))

[2]Target dates: Completion dates achieved by use of construction management staging of design and construction.

[3]Dollars escalated to estimated 1975 value.

RESTORATION AND RENOVATION OF BUILDINGS

1973 Appropriation.....$5,014,000
1974 Appropriation.....$1,070,000
1975 Estimate.....$1,325,000

This account is used to fund major repairs, alterations, and improvements of a long-term nature and utility. From time to time, it is used also for construction of minor new temporary and permanent buildings or other facilities. Projects undertaken are in support of research, care and protection of collections, public safety and accommodation, and maintenance of a valuable physical plant and natural areas.

With funds available, the Institution is carrying out several significant projects, including the air conditioning and renovation of the Arts and Industries Building for special Bicentennial use. Continuation funding for certain of these and funding for new projects is sought in the FY 1975 appropriation.

An appropriation of $1,325,000 is required for the following projects:

1.	Mt. Hopkins, Arizona, Observatory power, road, and water improvements	$200,000
2.	National Zoological Park Animal Conservation Center	125,000
3.	History and Technology Building and Natural History Building fire control systems	150,000
4.	Tropical Research Institute laboratory improvements	75,000
5.	Fine Arts and Portrait Galleries storage space and temperature control	35,000
6.	Arts and Industries Building renovation	300,000
7.	South Yard visitor improvements	300,000
8.	Library space improvements	50,000
9.	General building and facility repairs and improvements	90,000
	Total	$1,325,000

Mt. Hopkins, Arizona, Observatory Power, Road, and Water System Improvements

An appropriation of $200,000 is requested to continue the program of power and road improvements and to initiate work on an adequate water system.

Using funds appropriated in FY 1973 and 1974 (a total of $420,000) the Smithsonian Astrophysical Observatory has undertaken a major phased renovation of the inadequate power system at its Mt. Hopkins, Arizona, Observatory, so that it will serve the rapidly increasing observational potential of the installation, including the needs of the multiple mirror telescope now being fabricated. Plans have been approved by the U. S. Forest Service and work is underway.

The U. S. Army Corps of Engineers is installing an improved electrical power distribution system to the ridge and summit areas of the Mt. Hopkins Observatory. FY 1975 plans are to extend the system into the summit bowl area. In addition, negotiations are proceeding with Citizens Utilities Co. for the construction of a commercial power line from the Amado area in the valley to the ridge area distribution point. Construction of the power line is expected to commence in FY 1974 and will be completed in FY 1975. Construction of a substation at the ridge area distribution point for the commercial power and switchgear for standby generators is planned for FY 1975. The amount of $100,000 is required in FY 1975 to complete these projects.

U. S. Forest Service approval also has been given to the plans and specifications for improvements to the site access road which extends from the valley to the 7,600 foot ridge area. Improvements to the ridge road and construction of the summit access road will be completed during FY 1974. Plans for FY 1975 include paving of these sections of the road. Repairs and improvements to the more dangerous sections of the Mt. Hopkins access road are being made during FY 1974 and will be continued in FY 1975 and following years. An amount of $86,000 is requested for this purpose in FY 1975. Through FY 1974 an amount of $185,000 has been appropriated for this safety and operational need.

Engineering source survey and design of a water supply system from nearby Mt. Wrightson is planned for FY 1975. This system will eliminate the problem of trucking water from the valley up the road to Mt. Hopkins, with attendant high labor cost and road damage from heavy trucking. Plans call for the installation of holding tanks at the summit and the ridge in FY 1975. The amount of $14,000 is needed for this project in FY 1975. Installation of the water pipe system in FY 1976 is estimated at $75,000.

National Zoological Park Animal Conservation Center

An appropriation of $125,000 is sought to make repairs and modifications to the National Zoological Park's Animal Conservation Center.

A 4,100-acre site, the former Beef Cattle Experiment Station at Front Royal, Virginia, was declared excess by the U. S. Department of Agriculture in November 1973. The Smithsonian Institution request for a temporary use permit was granted by the General Services Administration in January 1974, and transfer of the property to the Smithsonian is pending.

The site will be used by the National Zoological Park for breeding endangered wildlife species and for associated research efforts. Space is the most critical resource needed to permit success in assuring survival of precious life forms as their numbers and home habitats disappear. Nucleus breeding groups are being assembled in cooperation with other zoos. A secondary use will be to hold animals displaced temporarily by Master Plan construction at the Zoo, as well as animals obtained in anticipation of construction completions. An additional very practical use is a source for silenium-rich hay needed for animal health.

Because of its past use as an animal facility, almost all of the utilities and structures required by the Zoo are in place. Accommodation of wild animals will require erection of a secure perimeter fence, in several annual increments, modification of existing barns and stables, and normal major repairs, such as replacement of sections of old water and sewer lines. The approximate spending plan for FY 1975 includes building modifications, including caging ($20,000); major repairs, chiefly water and sewer lines ($10,000); and fencing and animal containment ($95,000) for a total of $125,000.

History and Technology Building and Natural History Building Fire Control Systems

An appropriation of $150,000 is requested to continue the phased program of installing fire control systems cited in the FY 1974 budget.

The disastrous fire which occurred in the History and Technology Building in September 1970 proved conclusively that fire control systems are a vital element in the protection of the national collections as well as a prime public safety requirement.

A program of incremental installation has been developed to coincide with other work such as repair and construction, the modification or installation of exhibitions, or other space changes. This will reduce installation costs of the fire control systems as well as assure that this work does not interfere unduly with ongoing activities.

The first increment of funds provided in FY 1974 ($75,000) will provide the basic fire protection data and the installation of systems to meet the highest priority needs of the History and Technology and Natural History Buildings based upon an engineering evaluation. Further installations will be made with the requested $150,000.

Tropical Research Institute Laboratory Improvements

An appropriation of $75,000 is sought to develop improved laboratory space at the Smithsonian Tropical Research Institute (STRI).

STRI is engaged in basic biological research, primarily in Panama, concerning especially questions of ecology and evolution in the tropics. Present facilities are inadequate. The Tivoli Hotel site (in the Canal Zone but adjacent to the Republic of Panama), recently vacated and made available to STRI, has several important advantages as the headquarters site to include offices for administrative staff and laboratories for staff and visiting researchers. The site has an existing structure, previously used as a kitchen building, suitable for renovation. It is close to the present overcrowded Ancon Building and is convenient for Panamanian students.

With funds available, work has begun at the site to make preliminary repairs to the exterior masonry and roof and to install initial electrical and plumbing facilities in portions of the building.

The FY 1975 budget amount of $75,000 will be used to continue the renovation of the kitchen building, including the installation of air conditioning and laboratory cabinets.

Fine Arts and Portrait Galleries Storage Space and Temperature Control

Funding of $35,000 will permit development of storage space and the installation of temperature control systems in an employee area of the Fine Arts and Portrait Galleries Building.

The National Collection of Fine Arts and the National Portrait Gallery are in need of additional storage space for shipping crates. At present, much needed public and work areas are being used for this purpose. The development of storage space in an existing vault under the courtyard, to include waterproofing, painting, lighting, and door installation, would solve an immediate problem and free currently used space to be utilized for its intended purposes.

It is also important to provide heating and air conditioning to approximately 12 rooms now housing employees located in a basement area. This area is used for locker rooms, shops, and other purposes. Currently fans and electric heaters are being used to provide some relief from uncomfortable temperatures.

Arts and Industries Building Renovation

The FY 1973 appropriation provided $3,355,000 for the major portion of the restoration and improvement of the Arts and Industries Building and for recreating the 1876 appearance of the rotunda and four main exhibition halls. The major improvements include the opening of the west entrance to the building, replacing obsolete and inadequate electrical and utilities systems, installing heating, ventilation and air conditioning systems, the installation of public and staff rest rooms, and related demolition and restoration incidental to the accomplishment of the project objectives.

The contract work for this portion of the project is expected to start in January 1974 with the expectation that exhibits installation can begin in 1975 for a major presentation, titled Centennial - 1876 which has been included in the President's Bicentennial Program. The funding for this special exhibition is included in the Institution's Bicentennial budget request.

An additional appropriation of $300,000 is requested to accomplish some additional improvements which are important to the functioning of the building and to protect the structure and interior finishes from weather damage. This additional work includes: replacement and repair of badly deteriorated window frames and sashes in the rotunda and the four major halls, essential in protecting the new exhibits to be installed in those areas; installation of an elevator to improve movement of visitors and especially the handicapped to the second floor of the building; the improvement of the building's east grounds to esthetic comparability with adjacent park areas; and the installation of insulation and new roofing on critical parts of the building.

South Yard Improvements

Funding of $300,000 will permit initial improvements for public use of the "South Yard," the area bounded by the original Smithsonian Building, the Arts and Industries Building, the Freer Gallery of Art, and Independence Avenue.

The long-range development of the "South Yard" will require more intensive study and planning development for future accomplishment. The $300,000 requested is for the first phase of this long-range project and will include the removal of some existing roadways and parking areas, the demolition of the temporary structures in this area following the relocation of the present activities to other quarters, removal of bases supporting the missiles presently on exhibit, certain landscape improvements, and revised surface treatments to achieve the initial development of a Victorian garden. The major portion of this work is planned to remain in place and will be extended as future development of the "South Yard" concept progresses.

The accomplishment of this initial phase will substantially upgrade the appearance and use of this valuable area and will create an inviting, restful area for Bicentennial visitors.

Library Space Improvements

An appropriation of $50,000 is needed for library space improvements. In FY 1971 the Smithsonian Institution Libraries began a long-range program of improving the physical conditions of existing areas and of increasing available space by installing decking in all areas where feasible. In FY 1971, $50,000 was appropriated to deck three adjoining rooms in the Natural History Building (on the north side of the library) and thus create necessary additional operating space. This project was completed in September 1972. In FY 1973, $60,000 was appropriated to begin a second phase of this program which entailed completing the decking and remodeling of the reading room and central stack areas on the south side of the library corridor. These funds were reprogrammed in FY 1973 to accommodate more urgent priorities. Plans for the completion of the north side of the corridor, as allowed by the reprogramming, are in the final stages.

The third phase of this program will involve extending the present decking (which dates from much earlier construction) on the south side of the corridor and expanding the central stack area, remodeling the reading room, and providing adequate work space for the reference and circulation staff. The central library reading room, reference area, and adjoining stack areas were created in 1963. The user population of the Museum of Natural History building has increased as has the use of this facility by visiting researchers and students in the last ten years. An appropriation of $50,000 is requested to begin this third phase. These funds will be used to remodel the reading room, including the building of necessary partitions, designing and constructing periodical display shelving, and carpeting and refurbishing the area to accommodate the increased user population.

General Building and Facility Repairs and Improvements

An appropriation of $90,000 is requested to enable the Institution to respond to repair and improvement needs in its buildings and facilities.

Not including the National Zoological Park (which has its own general repair and renovation fund for its many buildings and acreage), the Smithsonian has eight major museum buildings (ranging in age from new to 125 years old) with a replacement value of several hundred million dollars, many lessor structures used for research and collections management purposes, and several thousand acres of natural preserve land devoted to research and education. Heavy public use of these facilities, general deterioration because of age and weathering, safety requirements, and the occasional need to make improvements or additions to keep pace with program requirements create the need for regular, annual attention. Anticipated needs are budgeted in this account under specific project headings. There is a strong need, however, for funds that will permit planning, engineering, repair, and improvement response to projects arising during the year that cannot be handled within the regular operating budget for buildings maintenance. The requested $90,000 will be used for these purposes.

CONSTRUCTION
(Liquidation of Contract Authority)

1973 Appropriation.....$13,000,000
1974 Appropriation.....$17,000,000
1975 Estimate.....$10,000,000

Construction of the National Air and Space Museum is well underway. The new museum being built on the site between Fourth Street and Seventh Street, Independence Avenue and Jefferson Drive, as authorized by Public Law 89-509, was 25 percent complete by mid-December 1973. The foundations, most structural steel, and some of the marble facing are already in place. The project is on schedule--estimated to be substantially completed by June 1975, within the authorized funding. At that time, exhibits will be installed for a scheduled public opening on July 4, 1976.

The construction manager system being used (under the supervision of the General Services Administration) is performing very well. The entire project has been divided into 27 construction contract packages. These are: watermain relocation; excavation; marble; structural steel; metal decks; foundations; curtain walls; skylights; roofing and sheetmetal; masonry; mechanical; electrical; elevators and escalators; concrete slabs; painting; fireproofing, insulation, partitions, and acoustics; kitchen and cafeteria equipment; miscellaneous metal; carpentry; spacearium dome; landscaping; auditorium screen; auditorium platform and podium; security gates; special equipment; art storage; and graphics. The first 20 of these contracts have been awarded. Through the spacearium dome contract, $29,074,914 had been obligated and $10,038,414 expended through November 1, 1973.

The liquidation of the final $10,000,000 of contract authority is requested in FY 1975 in order to assure the timely completion of the building for its public opening.

APPENDIX

Report of Obligations by Objects
(In thousands of dollars)

	1973 Actual	1974 Estimate	1975 Estimate	Increase '75 over '74
11 Personnel Compensation.....	32,062	36,836	42,254	5,418
12 Personnel Benefits.....	2,716	3,170	3,659	489
21 Travel & Transportation of Persons.....	554	672	784	112
22 Transporation of Things.....	249	305	329	24
23 Rent, Communications, and Utilities.....	3,390	3,873	5,144	1,271
24 Printing and Reproduction....	602	706	1,511	805
25 Other Services.....	6,471	6,166	8,790	2,624
26 Supplies and Materials.....	2,055	2,381	3,101	720
31 Equipment.....	3,303	3,160	2,785	-375
32 Lands and Structures.....	0	0	0	0
41 Grants.....	1,812	3,022	3,193	171
42 Insurance, Claims, and Indemnities.....	5	0	9	9
Total Obligations.....	53,219	60,291	71,559	11,268
Lapsing.....	14	0	0	0
Total Appropriation.....	53,233/1	60,291/2	71,559/3	11,268/3

/1 This amount includes $51,633 for Salaries and Expenses and $1,600 for Science Information Exchange.

/2 This amount includes $58,596 for Salaries and Expenses and $1,695 for Science Information Exchange. Also includes $3,203 for pay supplemental.

/3 This amount includes $1,856 for necessary pay and $1,044 for other uncontrollable increases.

SMITHSONIAN VISITORS
(By fiscal year)

Fiscal Year	Smithsonian Institution Building	Arts and Industries Building	Museum of Natural History	National Air & Space Building	Freer Gallery of Art	Museum of History & Technology	Fine Arts & Portrait Gallery	Renwick Gallery	Total 9/
1961	1,024,526	2,912,371	2,047,973	987,858	130,746	(1)	(3)	(10)	7,103,474
1962	1,222,112	3,471,050	2,113,053	1,986,319	130,597	(1)	(3)	(10)	8,923,131
1963	1,630,280	3,534,182	2,288,397	2,673,618	183,359	(1)	(3)	(10)	10,309,836
1964	1,311,061	2,457,243	2,512,306	1,854,186	168,625	2,509,774 1/	(3)	(10)	10,813,195 2/
1965	1,065,635	2,028,175	3,051,472	1,705,683	210,972	5,091,776	(3)	(10)	13,153,713
1966	870,010	1,746,715	2,988,006	1,494,922	222,089	4,829,112	(3)	(10)	12,150,854
1967	1,020,312	1,638,873	3,409,957	1,484,422	212,920	5,546,102	(3)	(10)	13,312,586
1968	847,176 5/	1,344,622	3,257,957	1,123,698	169,533	4,750,023	30,888	(10)	11,523,897 4/
1969	275,259 5/	1,493,141 6/	2,916,749	1,225,959	179,374	4,174,071	166,177	(10)	10,430,730 7/
1970	5/	2,557,155 6/	3,269,791	1,839,373	217,305	5,483,555	216,523	(10)	13,583,702 8/
1971	681,255	1,985,732	3,456,755	1,337,445	190,425	5,955,128	194,468	(10)	13,801,208
1972	819,617	2,306,071	3,414,640	1,104,151	230,475	6,808,526	246,657	105,186	15,035,323
1973	807,294	2,285,603	3,306,105	1,223,917	204,858	6,905,339	254,005	165,846	15,152,967

1/ Museum of History and Technology opened January 1964
2/ July-August 1964, certain Smithsonian Institution buildings were open 4:30 to 10 p.m. for the first time.
3/ National Collection of Fine Arts opened May 1968 and the National Portrait Gallery in October 1968.
4/ Reflects the significant decrease in visitors to the Nation's Capital in the first six months of CY 1968 due to unsettled local conditions.
5/ Building closed for renovation October 1968.
6/ Since the first display of the lunar sample in September 1969, visitors to this building have averaged approximately 270,000 per month.
7/ Fiscal year 1969 visitor totals represent the effect of local conditions in late 1968 on visitor attendance. During CY 1969, a total of 12,438,909 visitors came to the Smithsonian, an increase of 25 percent over CY 1968.
8/ Reflects a significant increase of 30 percent in visitors to the Smithsonian's Museums and Galleries.
9/ An additional 5,000,000 visitors to the National Zoological Park annually and 50,000 to the Anacostia Museum are excluded from these totals.
10/ Renwick Gallery opened January 1972.

NATIONAL GALLERY OF ART

"Salaries and Expenses"
ESTIMATES FOR THE FISCAL YEAR 1975

HIGHLIGHT STATEMENT

1974 Requirement and 1975 Request

The Congress appropriated $5,832,000 for "Salaries and Expenses, National Gallery of Art, 1974." Pay act increases effective January 7, 1973 and October 14, 1973, and a wage-board pay increase effective October 28, 1973, will raise current-year operating costs $370,000 above the appropriated amount. A 1974 supplemental appropriation to cover these pay increases is anticipated. Including the anticipated supplemental, the total current-year requirement is $6,202,000. This amount will support an average employment of 380 in the 411 full-time permanent positions authorized. The appropriation requested for fiscal year 1975 is $6,673,000--a net increase of $471,000 over the 1974 requirement.

1975 Program

Nondiscretionary increases in 1975 total $158,300. This is the amount required to place 14 positions (filled for only the last three quarters of the current-year) on an annual basis; to pay mandatory salary increases; and to pay for the extra compensable day in fiscal year 1975.

Increases for 15 new positions and related costs total $158,400. Five of these positions are associated with the continued development of a library and photographic collection to serve the study center planned in the new East Building; four of the positions are to manage the increased curatorial workloads in our growing European, American, and Graphic Arts Collections, and the remaining 6 new positions are to provide additional staff in administration and public service functions.

Increases in materials, equipment, and services to sustain established functions total $142,000. This total is comprised of $70,000 for the additional support of temporary exhibitions, including special exhibitions relating to the Revolution Bicentennial; $13,500 for additional extension service materials; $55,000 for the processing and printing of archival photographic negatives; and $3,500 for an automatic collator with stapler attachment.

Increases in materials and services for repair and maintenance of the building's air conditioning system total $90,000. This amount will provide $60,000 for the internal cleaning of the air conditioning ducts and $30,000 for the replacement of existing low-efficiency filter banks with modern high-efficiency filters.

The increases summarized above total $548,700, but are offset by $77,700 in decreases from the current year for a net increase of $471,000.

Authorizing Legislation

This request for an appropriation is based on the premises contained in section 4(a) of the Joint Resolution of Congress, March 24, 1937, (20 U.S.C. 71-75) in which:

"The faith of the United States is pledged that...the United States will provide such funds as may be necessary for the upkeep of the National Gallery of Art and the administrative expenses and costs of operation thereof, including the protection and care of works of art acquired by the Board, so that the National Gallery of Art shall be at all times properly maintained and the works of art contained therein shall be exhibited regularly to the general public free of charge."

NATIONAL GALLERY OF ART

Salaries and Expenses

Appropriation, 1973	$5,420,000
Appropriation, 1974, including anticipated supplemental of $370,000	$6,202,000

Summary of Increases and Decreases

1.	To pay, on a full-year basis, wage and salary increases, effective for only a portion of the current year	73,700
2.	To pay personnel compensation and benefits to place 14 positions (filled for only 9 months in 1974) on an annual basis	38,800
3.	To pay for statutory within-grade promotions and wage-board step increases	21,400
4.	To pay personnel costs for one extra compensable day in fiscal year 1975	18,700
5.	To pay for 11.25 man-years of employment in 15 new positions	164,100
6.	To pay for an increase in the support of temporary exhibitions	70,000
7.	To pay for the processing and printing of archival photographic negatives	55,000
8.	To pay for the cleaning of air conditioning ducts	60,000
9.	To pay for the replacement of filter banks in air conditioning system	30,000
10.	To pay for materials for 2 new Extension Service slide lectures	13,500
11.	To pay for an automatic collator with a stapler attachment	3,500
12.	Reduction due to non-recurring equipment purchases in 1974	-69,300
13.	Reduction due to decrease in accident compensation payments	-8,400
	Net change, 1975	+471,000
	Budget estimate, 1975	$6,673,000

EXPLANATION OF INCREASES AND DECREASES

1. Additional cost of current-year wage and salary increases, $73,700

Wage rates under the Federal Wage System were increased by 7.5%, effective October 28, 1973. In the current year the increased rates will be in effect for 17.5 bi-weekly pay periods at an estimated cost of $35,000. For the additional 8.6 pay periods in 1975, the added cost will be $25,700.

Salary rates for General Schedule employees were increased by 4.77%, effective October 14, 1973. These increased rates are effective for 18.5 bi-weekly pay periods in the current year at an estimated cost of $129,000. The added cost for the additional 7.6 pay periods in 1975 is $48,000.

2. Personnel costs to place 14 positions (filled for only 9 months in 1974) on an annual basis, $38,800

Fourteen new positions were authorized for the current year, but funds were provided to cover employment costs for only the last three quarters of the year. The additional amount needed to support these positions for the full year in 1975 is $38,800.

3. Personnel costs for statutory within-grade promotions and wage-board step increases, $21,400

The net cost of within-grade promotions in the GS series and wage-board step increases is estimated at $21,400 for fiscal year 1975:

$10,300 for 326 General Schedule positions, and
$11,100 for 100 wage-board positions.

4. Additional compensable day in 1975, $18,700

Fiscal year 1975 covers 261 compensable days--one more than the 260 in the current year. Personnel compensation and benefits for this additional day, based on an average employment of 380 in full-time permanent positions will cost $18,700.

5. Employment in 15 new positions for three quarters of the year, $164,100

The 15 new positions are justified below under four functional groups:

a. Positions for curatorial staff ($57,400)

	Grade	Annual Salary
Museum Technician (American Art Collection)...	GS-5	$ 8,055
Museum Curator (European Art Collection)	GS-11	14,671
Curator-in-charge (Graphic Arts Collection)...	GS-14	24,247
Assistant Curator (Graphic Arts Collection)...	GS-13	20,677
Total compensation		$67,650
Personnel benefits		6,021
Annual cost		$73,671

The $57,400 requested will pay the above costs for about three quarters in 1975, and will provide $2,500 for office furniture and equipment.

We are requesting four new positions to complement our present staff. These additional positions are necessary due to the heavier workload generated by new acquisitions over the past several years, the increasing amount of curatorial effort required prior to each new acquisition, and the urgent necessity for more scholarly research and documentation with respect to the existing collections.

For the American Art Collection, now staffed with a curator, an assistant curator, and a secretary, we are requesting a museum tech-

nician (GS-5) to assist in the care and maintenance of some 17,000 water-color renderings in the Index of American Design.

For the European Art Collection, we are requesting one additional position, a curator (GS-11) to complement our present staff of two curators.

For the Graphic Arts Collection, we are requesting positions for a GS-14 Curator-in-Charge, and a GS-13 Assistant Curator. These positions are needed to replace similar positions for which donated funds were made available for the temporary employment of two exceptionally qualified curators who as aliens could not be appointed in the competitive Civil Service. After two years both of these employees have decided to return to their native countries. Donated funds will not be available beyond the end of the current year for the salaries of their replacements. These two positions will enable us to maintain our present staff of five curators and one clerk-stenographer. The Gallery's Graphic Arts Collection contains some 27,000 prints and drawings, new acquisitions number 200 to 300 per year, and the staff is expected to plan and execute at least one major and several less important temporary exhibitions each year.

b. Positions for Library and Photographic Collection Staffs ($55,400)

	Grade	Annual Salary
Librarian	GS-13	$20,677
Photographic Collection:		
Cataloger	GS-11	14,671
Cataloger	GS-7	9,969
Photographic Technician	GS-7	9,969
Order Clerk	GS-5	8,055
Total compensation		$63,341
Personnel benefits		5,637
Annual cost		$68,978

The $55,400 requested will pay the above costs for about three quarters in 1975 and will allow $4,000 for office equipment and furniture.

In the current year, the total positions authorized for the Library and Photographic Collection are 13 and 4 respectively. For fiscal year 1975, one additional position is being requested for the Library and four more positions for the Photographic Collection.

As stated in our budget justifications for the past four years, funds donated for the specific purpose are being used to acquire books and photographs for the fine art library that will serve the Center for Advanced Study in the Visual Arts to be in the new East Building. Over $1,000,000 has been received to date for these purposes. The Library is expected to contain over 200,000 books, pamphlets, and bound periodicals; and the Photographic Collection will total some 2,000,000 photographs and negatives. Last year over 6,000 items were acquired for the Library, and over 163,000 items were acquired for the Photographic Collection. Because of insufficient staff to organize and maintain the new materials (especially in the Photographic Col-

lection) it has become necessary to curtail acquisitions. The increase in staff requested will help attain an acquisition rate more consistent with the goals set for the Library and Photographic Collection.

c. Positions for Extension Service Staff ($14,500)

	Grade	Annual Salary
Shipping Clerk	GS-5	$ 8,055
Clerk-Typist	GS-5	8,055
Total compensation		$16,110
Personnel benefits		1,434
Annual cost		$17,544

The $14,500 requested will pay the above costs for approximately three quarters of the year and will allow $1,300 for office furniture and equipment.

With two new positions to be added in the current year, a total of 12 positions are authorized for the Extension Service. The increase in this staff has followed the upward trend in the number of loans being processed. A total of 29,432 loans were processed in fiscal year 1973, an increase of 2,552 over the prior fiscal year. To keep pace with this trend, to give better service, and to reduce the need for overtime work, we are requesting two additional positions for fiscal year 1975.

d. Positions for supporting functions ($36,800)

	Grade	Annual Salary
Editorial Assistant	GS-11	$14,671
Museum Technician (Packer)	GS-7	9,969
Audio-Visual Technician	GS-7	9,969
Clerk-Typist	GS-4	7,198
Total compensation		$41,807
Personnel benefits		3,721
Annual Cost		$45,528

The $36,800 requested will pay the above costs for about three quarters of the year and will allow $3,000 for office furniture and equipment.

In support of the greater emphasis on the lasting educational values of temporary exhibitions, the publications of the Gallery have increased dramatically in both quantity and quality. There are now 5 positions authorized for the Editor's Office. The additional Editorial Assistant requested will enable this office to meet the increasing workload associated with the exhibitions scheduled for 1975.

The Museum Technician (Packer) is urgently needed because of the expanding number of temporary exhibitions consisting of many fragile articles of indigenous art and modern art in all forms and sizes. Also, the operation of a National Lending Service to loan original

works of art to small museums will be in its second active year by 1975 with an increasing number of objects to be packed and shipped by the Gallery staff.

The Audio-Visual Technician will make a total of two employees in the field. Together with a motion-picture projectionist, the new employee will operate and maintain the projection equipment in continuous operation in the Information Room, the closed-circuit radio system providing taped lectures in some 30 galleries, the equipment in a modern recording studio, and film inspection machines and other audio-visual equipment used by the Extension Service.

The Clerk-Typist will provide typing service for the budget analyst, a management analyst, and an auditor for construction accounts. These three positions are located in the Treasurer's Office where now, out of 13 employees, only two employees are assigned to typing positions (including that of Secretary to the Treasurer). The additional clerk-typist requested will help improve the overall management of the Gallery by making possible the more complete and timely reporting of procedures and methods studies, budget status reports, and financial statements and analyses. Due to this shortage of typists, deadlines and schedules for the output of the Treasurer's Office are often impossible to meet.

6. Increase in the support of temporary exhibitions, $70,000

The current-year budget carries $140,000 to help cover the costs of the Gallery's temporary exhibitions. This amount is being supplemented by $103,000 from the income of the Gallery's endowment fund for a total of $243,000. That income is relatively fixed and will not be sufficient in 1975 to provide the increased funds required due to higher costs for art loans, insurance, transportation, and exhibit installations incident to this vital museum activity. Also in 1975, we will start to work on two exhibitions in celebration of the Revolution Bicentennial--one to open in the winter of 1975-76 and the other to open in the summer of 1976. The following tabulation indicates the support provided temporary exhibitions (actual and estimated, 1972-1975):

	Actual 1972	Actual 1973	Estimate 1974	Estimate 1975
Gallery appropriation ...	$132,000	$137,000	$140,000	$210,000
Gallery endowment fund ..	54,000	110,000	103,000	103,000
Total	$186,000	$247,000	$243,000	$313,000

7. Processing and printing of archival photographic negatives, $55,000

The Photographic Collection has acquired some 163,000 negatives over the past three years. In order to be of any use we must obtain a print from each of these negatives. Before printing, each negative must be washed to insure that its physical condition meets present archival standards of permanence. Many of these negatives, before coming to the Gallery, were stored in highly acid, low-grade cardboard boxes which had begun to deteriorate. Such an environment which would in time cause the destruction of the negatives, makes washing a necessary step in their preservation. Also, washing is required to insure the complete removal of all harmful, residual chemicals which may not have been removed in the original processing. The cost to wash and print some 18,000 negatives is estimated at $55,000.

8. Cleaning of air conditioning ducts, $60,000

The ducts in the air conditioning system, in use for 32 years, have never been cleaned. The initial intake of outside air is filtered and washed before being circulated; whereas, any return air which is recirculated is only filtered. By cleaning the air ducts, less dust would circulate in the system. Thus, the air supplied to conditioned spaces would be cleaner. The total cost of cleaning these air ducts is estimated at $60,000. This is based on some 200,000 square footage at a unit cost of $.30.

9. Replacement of existing filter banks in air conditioning system, $30,000

We are requesting $30,000 to replace the existing low-efficiency filter banks with modern high-efficiency filters. The present filters pass up to 65% atmospheric dust and require changing approximately every four months at $12 per year per unit. The new filters will pass a maximum of 45% atmospheric dust and are expected to require changing every two years at an estimated cost of $12.75 per year per unit. In total, there are some 1,000 units in the system to be replaced at an estimated cost of $30 per unit.

10. Materials for 2 new Extension Service slide lectures, $13,500

The Extension Service circulated 15 different slide lectures during the past year. No new subjects in slide lecture programs have been added for over two years, although one new lecture, "What is Impressionism" will be completed for distribution this fall. We are requesting $13,500 for developing two new slide lectures to be aimed at capturing the lasting educational values of temporary exhibitions. The amount requested would enable us to produce 250 copies of two different 20 minute slide lectures.

11. Automatic collator with stapler attachment, $3,500

The present manually-operated collating machine was purchased in 1959 at a cost of $750. This machine has encountered several breakdowns during the last few years and can no longer be kept in working order because repair parts are not available. A modern machine to replace the present obsolete one is available under a GSA contract for $3,500.

12. Decrease for non-recurring equipment, $69,300

Non-recurring equipment items provided for in the 1974 appropriation total $69,300--an electronic accounting machine, sound studio tape recorder, two x-ray machines, data processing equipment, and equipment for 14 new positions.

13. Decrease in accident compensation payment, $8,400

The 1973 billing to the Gallery for accident compensation is $8,871. This amount, payable in fiscal year 1975, is $8,400 less than the sum for payment in the current year.

STATUS OF PROGRAM

Changes in Management Requirement:

An average employment of 372 (including the full-time equivalent of part-time and intermittent employment) was maintained during fiscal year 1973. This reduced employment (10 man-years under the 382 indicated in the 1974 budget) was required to permit absorption of the wage-board and general schedule pay increase costs amounting to some $119,000. To realize this saving it was necessary to defer filling 40

positions (new in 1972 and 1973) for three months. Total 1973 obligations for personnel compensation and benefits were $709 under the estimated figure as indicated in the 1974 budget. In total, 1973 obligations amounted to $4,407,291 for compensation and benefits, and $1,012,699 for all other obligations.

A total of $5,060,000 is estimated for personnel compensation and benefits in 1974 to support an average employment of 402 (including the full-time equivalent of part-time and intermittent employment). This estimate anticipates a supplemental appropriation of $370,000 to provide for the following pay increases: General Schedule pay increases effective January 7, 1973, amounting to $192,000 in current-year costs; General Schedule pay increases effective October 14, 1973, amounting to $127,000 in current-year costs; and wage-board pay increases effective October 28, 1973, amounting to $49,000 in current-year costs. This amount provides for part-year employment in 14 new positions authorized for 1974.

Funds are requested in 1975 to support an average employment of 419--an increase of 17 over the current year. Approximately 65% of this increase in average employment represents 15 new positions to be filled for about three quarters of the year while the remaining of the increase relates to present positions to be filled for only a part of the current year. Net increases in 1975 for personnel compensation and benefits total $298,000. Other increases are: $90,000 for the repair and maintenance of the building's air conditioning system; $70,000 for the increased support of temporary exhibitions; $55,000 for the processing and printing of archival photographic negatives; and $13,500 for additional extension service materials. In addition, net decreases in equipment to be purchased in 1975 at a total cost of $13,800 is $55,500 less than the amount available in the current year. The 1975 proposed appropriation of $6,673,000 exceeds the 1974 amount by $471,000.

Accessions:

During the 1973 fiscal year 266 works of art were acquired, including 239 prints and drawings.

Special Exhibitions:

The following exhibitions were held at the National Gallery of Art during the fiscal year 1973:

Cezanne Watercolors (Lent by Mr. and Mrs. Henry Pearlman)--continued from the previous fiscal year through August 11, 1972.

The Art of Wilhelm Lehmbruck--continued from the previous fiscal year through August 13, 1972.

Prints by M. C. Escher--continued from the previous fiscal year through November 2, 1972.

Prints by Edvard Munch--continued from the previous fiscal year through November 7, 1972.

Old Master Drawings from Christ Church, Oxford--September 16, 1972 through October 22, 1972.

Frederick Law Olmsted/U.S.A. (1822-1903)--October 21, 1972 through January 7, 1973.

A Survey of the Mezzotint Technique--November 3, 1972 through March 21, 1973.

American Glass: Watercolors from the Index of American Design--November 13, 1972 through the end of the fiscal year.

The Far North: 2000 Years of American Eskimo and Indian Art--March 8, 1972 through May 15, 1973.

Impressionist and Post-Impressionist Paintings from the U.S.S.R.--April 1, 1973 through April 29, 1973.

Etchings by Rembrandt--April 17, 1973 through the end of the fiscal year.

Prints of the Italian Renaissance--June 23, 1973 through the end of the fiscal year.

Extension Service:

This service circulates Gallery films, slide-lecture sets, and film strips to schools and other organized groups. All materials are lent free of charge except for shipping expenses. In fiscal year 1973, distribution of the "Pioneers of Modern Painting" film series was begun. Seventy-two copies of the films (12 sets consisting of 6 films each) were circulated in 3,033 bookings. Five hundred and sixty-seven prints of seven films on the National Gallery and its collections were circulated in 5,399 bookings--an increase of 1671 bookings over 1972. Distribution of the "Civilisation" film series to small colleges was continued. Two hundred and eighty-six copies of the films (22 sets consisting of 13 films each) were circulated in 4,056 bookings this past year. A total of 3,022 slide-lecture sets were circulated in 11,856 bookings--an increase of 303 bookings over 1972. The special project of placing slide-lecture sets on long-term loans with school systems was continued. These slide sets were used in 5,088 bookings. Total bookings for all items numbered 29,432 compared with 26,880 in 1972.

Education Office:

The staff of the Education Office continued to give daily tours and talks in the galleries, morning and afternoon, throughout the year. The attendance for the scheduled tours was 54,881. Lectures, films and tours given by special appointment served 36,431 visitors. There were 50 Sunday auditorium lectures illustrated with art films or slides, attended by 13,369 persons. Members of the Education Office prepared and recorded 37 radio broadcasts during the year.

Library acquisitions:

During the year the Gallery library acquired 5,261 books, 1,039 pamphlets, and 190 bound volumes of periodicals. The library now has 35,996 books, 27,052 pamphlets, and 3,211 bound volumes of periodicals. A total 163,279 photographs were acquired for the photographic collection. The collection now numbers 329,491 items.

Photographic Laboratory:

The Photographic Laboratory of the Gallery made 163,745 color slides, 1,509 black and white slides, 3,922 black and white negatives, 679 color transparencies, and 94 infrared and ultraviolet photographs, in addition to the prints required for study work and sale to the public.

Concerts:

The Sunday evening concerts in the East Garden Court were continued throughout the year. These concerts are free to the public.

Attendance and Maintenance:

There were 1,619,581 visitors to the Gallery during the fiscal year 1973--an increase of 210,327 over fiscal year 1972. The average daily attendance for the year was 4,462. The Gallery as a whole was maintained at a standard in keeping with the conditions of the gift of the building and the initial collection of works of art.

SALARIES AND EXPENSES

Object Classification (in thousands of dollars)

		1973 Actual	1974 estimate	1975 estimate
	Personnel compensation:			
11.1	Permanent positions	3,661	4,233	4,508
11.3	Positions other than permanent	118	142	144
11.5	Other personnel compensation	289	291	295
	Total personnel compensation	4,068	4,666	4,947
12.1	Personnel benefits: Civilian employees	339	394	411
21.0	Travel and transportation of persons	33	33	38
22.0	Transportation of things	6	8	13
23.0	Rent, communications and utilities	317	349	349
24.0	Printing and reproduction	31	38	43
25.0	Other services	284	213	338
26.0	Supplies and materials	224	226	297
31.0	Equipment	165	154	142
32.0	Lands and structures	78	59	53
	Total costs, funded	5,545	6,140	6,631
94.0	Change in selected resources	-125	62	42
99.0	Total obligations	5,420	6,202	6,673

Personnel Summary

Total number of permanent positions	397	411	426
Full-time equivalent of other positions	21	22	22
Average paid employment	372	402	419
Average GS grade	6.3	6.3	6.4
Average GS salary	$10,969	$11,630	$11,725
Average salary of ungraded positions	$9,040	$9,782	$10,084

WOODROW WILSON INTERNATIONAL CENTER FOR SCHOLARS

GENERAL STATEMENT

The Woodrow Wilson International Center for Scholars has now been in operation for a little over three years. It has acquired a distinct institutional life, an inventory of achievement, and a new sense of its unique potential as a "living memorial" to both the scholarly intensity and public concerns of a former President.

The Center's on-going program of selecting fellows and facilitating their productive use of the vast resources of the Washington area remains central. An expanded range of activities is being added under the category of public service in order to encourage the more effective communication of scholars with the public sector.

As of January 1, 1974, the Board of Trustees has approved 118 fellowship appointments for scholars coming from a broad variety of disciplines and professions -- social sciences, humanities and natural sciences, law, diplomacy, journalism, and government. Approximately 60 percent of the scholars selected come from the United States; the remaining 40 percent come from 27 other countries and all major geographic regions. In addition the Center has made 34 guest scholar appointments and its facilities have been used by dozens of visiting scholars on an occasional basis.

A review of the first two years of the program by the Board of Trustees in December, 1972, reaffirmed the need for "the study of fundamental political, social and intellectual issues" and pointed especially to a need for the "broadening of the representation of scholarly disciplines", particularly from the humanities, in pursuit of the Center's continuing effort to "illuminate man's understanding of critical contemporary and emerging problems." The commitment of the Center to superior scholarship was underscored by the recent appointment of a professor of history from Princeton University as the second director of the Center. A humanist and recent Chairman for two years of the Board of Foreign Scholarships, he assumed the directorship on September 1 and is taking steps to broaden the base of recruitment both at home and abroad -- and to explore new and inter-disciplinary areas that may enrich the program of the Center.

At the same time, continued attention will be paid to the five subject areas in which fellowship applications have been particularly encouraged:

(1) fundamental long-range issues of peace, world order and United States international responsibilities in the post-Vietnam period; (2) man's relationship to his deteriorating environment, with special attention to the institutional, political, social and value changes needed to effect environmental understanding; (3) the development of law and cooperation in the uses of the oceans; (4) investigations into aspects of sustainable growth; and (5) studies of the period of the American Revolution and the Enlightenment and the American system of government as it enters the third century.

Center scholars have produced -- or are in the process of producing for publication -- a substantial number of articles, monographs and book-length manuscripts on a wide range of subjects, the majority related to one of the Center's special areas of interest. As part of its mandate to strengthen the ties between the world of learning and the world of public affairs, the Center has sponsored dozens of public events, symposia, conferences and seminars. New approaches, based on a regular series of evening discussion groups, are being developed.

The trustees and staff are continuing to make systematic appeals for funds from private sources, and as of January 1, 1974, the Center had raised approximately $704,730. In addition, fellows appointed to date have commitments totaling $548,508 in outside support during the periods of their appointments at the Center (in the form of sabbaticals, leave pay and other fellowships and grants).

The Center's stipend policy, as explained in previous years, is based on the practice of other advanced studies centers. Each appointed fellow needing financial support is asked in the first instance to devote his sabbatical, leave or other income to be received during the fellowship period toward his support while at the Center and to seek outside foundation or other support for his study proposal whenever possible. Thereafter the Center's policy is to attempt to provide the fellow with a stipend rate which would be a no-gain, no-loss figure over his earned income rate in the preceding year within the individual limit of $30,000 of federal funds set by the Board, and with a cost-of-living increase for each non-U.S. scholar to bring him to an approximately equivalent stipend rate with U.S. scholars of comparable experience and position.

The average fellowship cost to the Center, including stipend, travel for scholars and their dependents, and disbursement charges, is $23,100. Most of the scholars appointed by the Center cannot be expected to come at a lower average cost than the one estimated. As indicated above, a substantial number of fellows will be devoting sabbatical or leave pay, foundation funds and other outside income to their support during the period of appointment at the Center.

As in previous years, the Center's goal in fiscal year 1975 will be to raise sufficient private money to complement the federal appropriation and keep the Center at capacity.

Because the majority of appointments must be made many months in advance of the date of the beginning of the period of appointment, the Center is requesting the same "no year" provision for the fiscal year 1975 appropriation that the Congress has provided in all previous appropriations to the Center.

1973 Appropriation	$ 800,000
1974 Appropriation	800,000
1975 Estimate	1,010,000

The Board of Trustees of the Wilson Center requests a federal appropriation for FY-1975 of $1,010,000, an increase of $210,000 over the Center's appropriations for FY-1973 and FY-1974. The larger request will permit the Center to engage in a set of studies, descriptions and explorations of new areas of knowledge often involving inter-disciplinary research and dialogue, which are not always accommodated in existing academic institutions. This new program is detailed below in category III, Public Service. The remainder of the increase will provide for corresponding increases in the administrative and support functions of the Center, due to the addition of the new Public Service category, and for 20 full-year fellowships from federal funds rather than 18 1/2.

I. Fellowship Program $462,000

The $462,000 requested will provide support for 20 full-year fellowships rather than the 18 1/2 provided for in the budget for FY-1974. The Center's federal budget provided for 20 full-year fellowships (of $23,100 apiece) in FY-72 but has not yet again attained that goal. The Center feels that given the vagaries of obtaining private support, the 20 full-year fellowship figure from federal funds is desirable in order to keep the Center at the desired level of occupancy.

II. Scholar Support $123,000

The Center is requesting $123,000 to maintain its library, provide a modest publication program of scholars' works, underwrite some support of its seminar program, and pay the salaries of its library staff and that part of the clerical staff working exclusively for the fellows.

The only increase in this category is $10,000 to the operations of the Center's library, making a new total of $30,000. The Center feels the increased amount for library operation is required to support the greater level of activity called for under the Public Service category detailed below.

The breakdown of the figure is as follows:

Library		$30,000
Printing		3,000
Seminars		3,000
Staff Salaries		
Library Staff (3)....	$36,000	
Clerical Staff (4) ..	45,000	
Benefits (8%)	6,000	87,000
		$123,000

III. Public Service $156,000

In order to enrich the development of its fellowship program by providing a forum for the exploration of new areas of inquiry in the nation's capital, and to improve and expand its service to those concerned with using the skills of scholarship for the concerns of contemporary civilization, the Center proposes the following new activities:

1. Selective support for scholars of acknowledged distinction in frontier disciplines, who will be brought to the Center to engage not in conventional research and writing, but rather to concentrate sustained attention on the search for (a) the new possibilities of scholarship in its relation to the needs of current civilization and (b) the relevant resources and opportunities of the Washington area in particular.

   Special attention will be given to scholars from areas of inquiry which may not yet find a place in conventional universities, research centers or in government. The distinguished scholar, who is freed to address himself to these questions would be expected to provide the director with a written report of opportunities and recommendations for the Center and for broader publication and dissemination where appropriate.

   Travel expenses, 3 x $2,000 .... $6,000

   Consultation fees, $100/day
   Average stay 2 months x 3 18,000

   Additional staff needs,
   1 clerical (GS-5) 8,000

   $32,000

2. Development of a regular series of biweekly evening discussions to explore new areas of knowledge and their implications for the public sector. These discussions would begin with a "structured dialogue" among a small group of major figures in the development of understanding on the topic under discussion. Other representatives from the Center, the world of learning and the world of public affairs would then join the discussion. This series would explore over the year themes and topics that bring together recent intellectual achievements and the current preoccupations of modern civilization and would hope to isolate some possible future areas of study for the fellowship program of the Wilson Center.

Travel of speakers, 12 x $1,000	$12,000
Consultation & honoraria, $1,000 fee, $500 other x 12 ..	18,000
Additional staff needs	
1 Professional (GS-12)	17,000
1 Clerical (GS-5)	8,000
	$55,000

3. Series of published studies, not traditional scholarship, growing out of 1. and 2. above, to aid in bridging the two worlds of scholarship and public affairs.

A. Bibliography of scholarly resources in the Washington area.

Temporary employee, 6 months	$8,000
Printing	6,000

B. Reports of individual frontier scholars as per 1 above

Printing , $800 x 3	2,400

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C. Critical abstracts of evening dialogues

Stenotypist, 12 x $500 ...	$ 6,000	
Printing 12 x 800	9,600	
Additional staff needs for A., B., and C. above		
1 editor (GS-11)	16,000	
1 clerical (GS-5)	8,000	
		56,000

4. Bibliography and inventory studies arising out of regular fellowship program (for example, Ocean Studies and Growth). This provides a service to the several publics of the Center as well as a basic resource for areas of existing emphasis in the fellowship program.

Contract bibliographer, approx. 20 weeks	5,000	
Additional typist, approx. 20 weeks	2,000	
Printing costs	6,000	
		13,000
		156,000

IV. General Administrative Expenses $269,000

This request provides for increasing the reimbursement payment to the Smithsonian Institution from $20,000 to $30,000 (a figure deemed more equitable by the Smithsonian in view of the services received) and for modest increases in the items for equipment, supplies, communications, duplication and miscellaneous due to the higher level of activity called for with the addition of the Public Service category.

The breakdown of this figure is as follows:

(1) Staff Salaries		
Four substantive positions (director, deputy director, administrative officer, assistant to the director)	$115,000	
Four clerical positions ranging from GS-6 to GS-9	50,000	
Benefits (8%)	13,000	
		$178,000
(2) Other Administrative Expenses		
Equipment	5,000	
Supplies	3,000	
Travel	10,000	
Consultation	10,000	
Communications	13,000	
Duplicating	15,000	
Miscellaneous	5,000	
		61,000
(3) Reimbursement to Smithsonian Institution		30,000
		$269,000

Fellows and Guest Scholars, 1973

INTERNATIONAL AFFAIRS

Roland G. M. Brown, U.K., international lawyer; legal consultant to the Government of Tanzania for International and Commercial Affairs (1965-72); Attorney General of Tanganyika (1961-65). World Bank policies on disputes over external debt, expropriation and breach of contract. (January 1973 - September 1973)

Rajeshwar Dayal, India, diplomat; former Foreign Secretary and head of the Indian Foreign Service; head of U.N. operations in the Congo (1960-61); former Permanent Representative to the U.N., Ambassador to France, Yugoslavia, Bulgaria, Romania and Greece; former High Commissioner in Pakistan. Analysis of the United Nations peacekeeping mission in Lebanon, 1958. (April 1973 - September 1973)

C. Alton Frye, political scientist, arms control specialist; formerly aide to Senator Edward W. Brooke; former staff member, the Rand Corporation. The legislative context of American foreign policy. Joint fellow of the Woodrow Wilson Center and the Council on Foreign Relations (November 1970 - December 1973)

Townsend W. Hoopes, government official, management consultant, author; Under Secretary of the Air Force (1967-69); author of "The Limits of Intervention" (1969). Coordinator of the Center's International Affairs studies group. Biography of John Foster Dulles, concentrating on reappraisal of Eisenhower - Dulles foreign policy. (July 1971 - June 1973)

Marian D. Irish, Professor of International Relations, School for International Service, American University, Washington, D.C.; author, co-author or editor of several books on American politics and foreign policy, including "Twelve Nation States: Approaches to Comparative Politics" (with Elke Frank, 1972). Formulation and implementation of U.S. foreign policy. (August 1972 - August 1973)

Benedict J. Kerkvliet, Assistant Professor of Political Science, University of Hawaii. Peasant unrest and the Huk rebellion in the Philippines (1930's - 1950's.) (September 1973 - September 1974)

Wilfrid F. Knapp, U.K., Fellow and Tutor in Politics, St. Catherine's College, University of Oxford; University Lecturer in Politics, University of Oxford. Author of A History of War and Peace, 1939-1965. Study of the growth and character of the United States presence in the Middle East since 1945. (September 1973 - December 1973)

Hongkoo Lee, Korea, Associate Professor of Political Science, Seoul National University. Social change, environmental perception and the international system; a study of political legitimacy with special reference to an emerging international order in the Far East. (January 1973 - January 1974)

K. P. Misra, India, Professor and Head of the Department of International Relations, School of International Studies, Nehru University, New Delhi. Author of India's Policy of Recognition of States and Government (1966) and Foreign Policy and Its Planning (1970). International Politics in the Indian Ocean area. (June 1973 - May 1974)

Patrick M. Morgan, Associate Professor of Political Science, Washington State University. Author of Theories and Approaches to International Politics (1972). Analysis of the utility of deterrence theory. (September 1973 - June 1974)

Robert A. Packenham, Associate Professor of Political Science, Stanford University. Author of Liberal America and the Third World: Political Development Ideas in Foreign Aid and Social Science (1973). Analysis of the literature on Latin American "dependency"; case study of political and economic relations between Brazil and the United States from 1961 to 1972. (September 1973 - February 1974)

Earl Ravenal, foreign affairs specialist, former government official. Reassessment of U.S. foreign and military policies toward Asia in the fifties. (September 1972 - July 1973)

W. Taylor Reveley, attorney, specialist in constitutional law. Joint fellow of the Woodrow Wilson Center and the Council on Foreign Relations. Nature of the constitutional requirements governing the commitment of the United States to war. (January 1973 - September 1973)

William R. Smyser, foreign service officer; staff member (Vietnam/Indochina), National Security Council (1970-71); member, U.S. Delegation, Paris Peace Conference (1968-70); fellow, Center for International Affairs, Harvard University (1971-72). Changes in American foreign policy since the mid-sixties, with particular emphasis on U.S. relations with Europe, the Soviet Union and China. (September 1972 - August 1973)

Vernon B. Van Dyke, Professor of Political Science, University of Iowa; author of "Political Science, a Philosophical Analysis" (1960); "Pride and Power, the Rationale for the Space Program" (1964); "Human Rights, the United States, and the World Community" (1970). International and comparative analysis of human rights and discrimination. (September 1972 - May 1973)

Peter Van Ness, Associate Professor of Political Science, School of International Studies, University of Denver. Author of Revolution and Chinese Foreign Policy: Peking's Support for Wars of National Liberation (1970). Empirical study of Chinese foreign relations and the role of the People's Republic of China in the international system for the period 1949-1971. (September 1973 - June 1974)

GENERAL STUDIES

Austin N. E. Amissah, Justice of Appeal, Government of Ghana; Dean, Faculty of Law, University of Ghana; former Attorney General. Role of the courts in the institutional development of newly independent countries. (January 1973 - December 1973)

Peter Braestrup, journalist, national staff writer, Washington Post. Treatment of government policy issues in Washington by major press and television organizations. (October 1973 - December 1974)

Wayne S. Cole, Professor of History, University of Maryland. Author of America First: The Battle Against Intervention, 1940-41 (1953); Senator Gerald P. Nye and American Foreign Relations (1962); An Interpretive History of American Foreign Relations (1968). Analysis of the active opposition of Charles A. Lindbergh to United States involvement in World War II. (January 1973 - August 1973)

Luiz de Aguiar Costa-Pinto, Brazil, Professor of Sociology, Federal University of Brazil, Fellow, Center for Advanced Study in the Behavioral Sciences (1970-71). Author of numerous publications on the sociology of development, social change, demography, social stratification. Comparative analysis of patterns of student protest in developed and developing countries. (June 1972 - July 1973)

Lewis A. Dexter, sociologist, political scientist. Author of The Politics and Sociology of Congress (1970); How Organizations are Represented in Washington (1969); co-author, American Business and Public Policy (1963). Restatement in contemporary terms of the historically conservative political philosophy of prudence and balance. (September 1973 - August 1974)

Ferdinand A. Hermens, Federal Republic of Germany, Professor of Political Science, Director of Research Institute and Seminar of Political Science,

University of Cologne. "Wilsonian approaches" to contemporary problems of peace maintenance and stability in democratic societies. (April 1972 - Jan. 1973) (October 1973 - December 1973)

Godfrey Hodgson, Great Britain, author, journalist, American Studies specialist; Foreign Features Editor, London Sunday Times (1970-72); co-author of "An American Melodrama: The Presidential Campaign of 1968" (1969). Changes in American politics and society between 1960 and 1972. (April 1972 - March 1973)

Charles S. Hyneman, Distinguished Service Professor of Government, Indiana University. Author of Bureaucracy in a Democracy (1950); The Study of Politics (1959); The Supreme Court on Trial (1963); Popular Government in America (1968). Origins and development of the U.S. federal system. (September 1973 - August 1974)

Sanford A. Lakoff, Professor of Political Science, University of Toronto. Author of Equality in Political Philosophy (1964); co-author of Science and Nation: Policy and Politics (1965). Analysis of the relations among science, technological development and politics. (September 1973 - June 1974)

James A. Moss, Professor of Sociology and Vice President for Academic Affairs, Medgar Evers College, City University of New York. International race relations. (September 1972 - March 1973) (July 1973 - August 1973)

Neal R. Peirce, Journalist, political scientist; Political editor, Congressional Quarterly (1961-69). Author of The People's President: The Electoral College in U.S. History and the Direct Vote Alternative (1968). Multivolume study of the politics and government of the fifty states. (

Eugene Rabinowitch, biophysicist, writer; Editor, Bulletin of the Atomic Scientists; Professor of Chemistry, State University of New York at Albany; Professor of Biophysics, State University of Illinois at Urbana (1942-68); author of "Photosynthesis" (3 volumes, 1945-56), "Dawn of a New Age" (1963). The scientific revolution and its social implications. (September 1972 - May 1973)

Raja Rao, India, philosopher, biographer, novelist; Professor of Philosophy, University of Texas; author of "The Serpent and the Rope" (1950), and three other novels; biographer of Gandhi. Wisdom, power and the state. (March 1973 - August 1973)

Julius Stone, Australia, Professor of Jurisprudence and International Law, University of Sydney. Author of The Province and Function of Law (1946); Legal System and Lawyer's Reasonings (1964); Human Law and Human Justice (1965); Social Dimensions of Law and Justice (1965). Law as instrument of social change. (July 1973 - December 1973)

Eugene Trani, diplomatic historian, Wilson specialist. Associate Professor of History, Southern Illinois University. Author of The Treaty of Portsmouth: An Adventure in American Diplomacy (1969). Woodrow Wilson and Russia, 1913 - 1921. (September 1972 - August 1973)

Robert H. Walker, Professor of American Civilization, George Washington University. Author of The Poet and the Gilded Age (1963); Life in the Age

of Enterprise (1967). Study on the theme of the contemporary American cultural revolution focusing upon changes in the quality of life that result from technological innovation, the disruption of traditional patterns of social and institutional change, and the diminishing cultural commitment to the concepts of growth and change as unquestioned positive values. (August 1972-September 1973)

ENVIRONMENT/GROWTH

Malcolm F. Baldwin, attorney; former Senior Legal Associate, the Conservation Foundation, Washington, D. C. Role of the international oil industry with respect to present and future energy/environment policy, particularly in the U.S. (June 1972 - June 1973)

Harry C. Blaney, foreign service officer; Special Assistant to the Chairman of the Council on Environmental Quality (1971-72), Special Assistant to White House Counsellor Daniel P. Moynihan (1969-71). International cooperation in areas of high technology with focus on new alternatives and policies, particularly in environmental matters. (July 1972 - June 1973)

Chester L. Cooper, research administrator, former government official; Director, International and Social Studies Division, Institute for Defense Analyses; author of "The Lost Crusade" (1970). Coordinator of the Center's Growth studies group, social and institutional factors as they bear on changing patterns of growth. (April 1972 -

Lincoln Gordon, political economist; Professor of International Economic Relations, Harvard University (1955-61); U.S. Ambassador to Brazil (1961-66); Assistant Secretary of State for Inter-American Affairs (1966-67); President, Johns Hopkins University (1967-71). International implications of changing patterns of economic growth. (June 1972 - June 1974)

Muhammad Shamsul Huq, Bangladesh, economist, educator; Minister for Education and Scientific Research, Government of Pakistan (1969 - 71); former Director of Public Instruction, Government of East Pakistan; Vice-Chancellor, Rajshahi University. Alternative patterns of growth in developing countries, with special attention to South and Southeast Asia. (September 1971 - February 1973)

John P. Milton, ecologist, author and editor; former Deputy Director for International Programs, the Conservation Foundation, Washington, D. C.; member, Committee on International Environmental Programs, National Academy of Sciences. Relationship between social and cultural change and environmental modification. (September 1972 - August 1973)

Ezra J. Mishan, U.K., Reader in Economics, London School of Economics and Political Science. Author of Welfare Economics: Ten Introductory Essays (1968), Technology and Growth: The Price We Pay (1969), and Elements of Cost Benefit Analysis (1972). Social consequences of economic growth. (September 1973 - October 1973)

Francis X. Murphy, CSSR, Professor of History, Academia Alfonsiana, Rome; Visiting Professor of Politics, Princeton University (1971-72); Peritus (expert), Vatican Council II (1962-65). Western religious institutions as they relate to problems of population growth and environmental deterioration. (September 1972 - September 1973)

Raimi O. Ojikutu, Nigeria, Senior Research Fellow (anthropology and human biology), School of African and Asian Studies, University of Lagos; Secretary, Nigeria National Committee for the International Biological Program (IBP). Environmental and ecological problems in Africa, with emphasis on adjustment of rural peoples to technological change and development. (July 1972 - August 1973)

John S. Owen, U.K., consultant on National Parks and Conservation in East and Central Africa; formerly Director, Tanzania National Parks. Conservation and development in East Africa. (April 1973 - August 1973)

Athelstan Spilhaus, meteorologist, oceanographer, environmentalist; President, American Association for the Advancement of Science (1970-71); former Dean, Institute of Technology, University of Minnesota. Environmental policy with regard to issues of energy consumption, transportation, experimental cities and population. (January 1971 - August 1974)

OCEAN STUDIES

Daniel Bardonnet, France, political scientist, international lawyer; Professor of Public and International Law, University of Rabat, Morocco. Practice of African states with respect to the law of the sea. (September 1972-June 1973)

Ruth Lapidoth, Israel, Associate Professor of International Law, the Hebrew University, Jerusalem. Freedom of navigation and the new law of the sea. (August 1973 - July 1974)

Arvid Pardo, Ambassador for Ocean Affairs, Government of Malta. Since 1964, when Malta attained independence, Dr. Pardo has served as its Permanent Representative to the United Nations; Ambassador to the United States; Ambassador to the Soviet Union; High Commissioner to Canada. Concentrating on various aspects of international ocean regimes, seabed questions. (September 1972 - August 1975)

Choon-ho Park, Korea, international lawyer. East Asia and the law of the sea: analysis of the policies of China, Japan, and Korea regarding their exploitation of natural resources in the Yellow Sea and the East China Sea. (February 1973 - January 1974)

Donald Walsh, oceanographer, political scientist; Commander, United States Navy. Definition, meaning, and application of the term "seapower", considered as the sum total of the nation's goals with respect to the world's oceans. (September 1973 - August 1974)

GUEST SCHOLARS

Russell W. Howe, Great Britain, journalist, writer on African Affairs. (December 1972 - January 1973)

Claire Nader, Political scientist; Associate Director, Oak Ridge National Laboratory-National Science Foundation Environmental Program. Assessment of the social and environmental consequences of technological innovations. (October 1972 - December 1973)

Evgeny S. Shershnev, Russia, Doctor of Economy, Deputy Director U.S.A. Institute, Academy of Sciences, U.S.S.R. Specialist in Economic Relations. (October 1973 - November 1973)

William B. Spong, United States Senator from Virginia (1967-73). Legislative-executive relationships, with particular reference to the war powers of the President; executive impoundment of congressional appropriations; congressional reform. (January 1973 - May 1973)

Alvin Weinberg, physicist, Director of the Oak Ridge National Laboratory. Author of Reflections on Big Science (1967). (February 1973 - March 1973)

COMING AT A LATER DATE

Dennis L. Bark, political scientist, specialist in German and European affairs, Fellow, Hoover Institution. Analyses of the directions, limitations, and alternatives for U.S. policy toward and relations with Europe during the coming decade. (Arriving March 1974)

S. N. Eisenstadt, Israel, Professor of Sociology, Hebrew University of Jerusalem. (Arriving Fall, 1974)

J. H. Plumb, U.K., Professor of Modern English History, University of Cambridge. Author of England in the Eighteenth Century (1950); The Renaissance (1961); Political Stability in England 1675-1725 (1967); The Death of the Past (1969); In the Light of History (1972). British politics during the American Revolutionary period. (Arriving Spring, 1975)

C. Richard Rose, Professor of Politics, University of Strathclyde, Glasgow, Scotland. Author of Governing without Consensus: an Irish Perspective (1971); People in Politics: Observations across the Atlantic (1970); Politics in England: An Interpretation (1964). New techniques of policy analysis: their uses and limitations. (Arriving June 1974)

Lawrence Kaplan, Professor of History, Kent State University. Franco-American relations 1778-1812 as a vehicle for examining the growth of isolationism in America. (Arriving January 1974)

John Logsdon, Associate Professor of Political Science, George Washington University. Changing national priorities and public policy for science and technology, an examination of decision making institution and processes. (Arriving February 1974)

Harry H. Ransom, Professor of Political Science, Vanderbilt University. Study of secret intelligence services in American democratic government. (Arriving September 1974)

Robert Rothstein, Associate Professor of Political Science, Johns Hopkins University. Analysis, for Third World States, of the interactions among the quest for economic development and political autonomy and the changing structure of the international systems since 1945. (Arriving July 1974)

Egon Sohmen, Austria, Professor of Economics, University of Heidelberg. Monograph on welfare economics (allocation theory) with particular emphasis on policy applications. (Arriving October 1974)

Ronald Stromberg, Professor of History, University of Wisconsin, Milwaukee, Wisconsin. Study of European intellectuals at the beginning of World War I. (Arriving May 1974)

Karol Wolfke, Poland, Professor of International Law, University of Warsaw. International law and the human environment. (Arriving October 1974)

Carlos Fuentes, Mexico, Novelist and essayist. Completing study, in fiction, of the formative influences that determined the history of the Spanish speaking people in the new world, together with a related essay on the passage from medieval to modern Hispanic civilization. (Arriving January 1974)

Elliot Richardson, formerly Secretary of the Department of Health, Education and Welfare, Secretary of Defense, and Attorney General of the United States. Study of the responsibility and responsiveness of sub-national government in the context of the federal system.

GUEST SCHOLAR

Longin Pastusiak, Poland, Director, American Studies Department, Polish Institute of International Affairs, Associate Professor of Political Science, University of Warsaw. Author of United States Policy in Germany, 1945-49 (1967); Essays on U.S. Foreign Policy (1968); U.S. Interests in the Middle East (1972). Study of the history of American diplomacy, 1776-1898. (Arriving January 1974)

Michael Sakellaropoulo, Canada, economist; Consultant to Maurice Strong. Executive Director, Environment Secretariat of the United Nations. (Arriving August 1974)

Kei Wakaizumi, Japan, Director, Institute of World Affairs, Kyoto Sangyo University, Tokyo. Post-war Japanese-U.S. relationships, with special emphasis on the negotiations which resulted in the reversion of Okinawa and on those which resulted in the textile agreement between Japan and the United States during the period of 1964-1972. (Arriving April 1974)

James Banner, Associate Professor of History, Princeton University. The politics of reform - a case study: the control and treatment of crime and insanity in Great Britain and the United States 1750-1850. (Arriving July 1974)

Francois Bondy, Swiss, editor, author, journalist. Relations between cultural-educational structures and political institutions in the USA and in the European "Community in Being." (Arriving January 1974)

Heraclio Bonilla, Peru, Associate Professor of Economics and History, Pontifical Catholic University of Peru. Economic relations between the United States and Peru 1890-1930. (Arriving January 1974)

Rondo Cameron, Professor of Economics and History, Emory University, Atlanta, Georgia. Ethical, social and politico-legal implications of technological change. (Arriving September 1974)

Douglas Chalmers, Associate Professor of Political Science, Columbia University. Comparative analysis of Argentina, Brazil and Italy in periods of multi-party competition and authoritarian regimes. (Arriving September 1974)

Martin Diamond, Professor of Political Science, Northern Illinois University. The Federalist's view of the separation of powers. (Arriving September 1974)

Roberto Etchepareborda, Argentina, Professor of Contemporary History. National University of Argentina, Bahia Blanca. Power politics in South America in the first decades of the 20th Century. (Arriving July 1974)

Hazel Hertzberg, Associate Professor of History and Education, Teachers College, Columbia University, N.Y. History and analysis of Indian rights movements in the United States since 1928. (Arriving September 1974)

Raymond Hopkins, Associate Professor of Political Science, Swarthmore College. Study of the extent to which selected domestic agencies of the United States government have organizational functions in international politics. (Arriving September 1974)

GUEST SPEAKERS

1973

EDGAR BERMAN, Physician and Political Advisor 1/16/73

CHARLES WILLIE, Vice President for Student Affairs, Syracuse University 1/26/73

LLOYD A. FREE, President, Institute for International Social Research 2/13/73

CHIEF O. AKINYEMI, Director, Nigerian Institute of Management, Fellow, Eisenhower Exchange Fellowships 2/20/73

RICHARD WILSON, former Editor of the "Far Eastern Economic Review," and author of A Quarter of Mankind 3/9/73

DAVID TRASK, Professor, Department of History, State University of New York, Stony Brook 3/23/73

NICHOLAS JOHNSON, Commissioner, Federal Communications Commission 3/30/73

ALEKSANDER FURSENKO, Soviet Academy of Science in Leningrad specializing in American history 4/3/73

ROGER CARLSMITH, Associate Director, Oak Ridge National Laboratory--National Science Foundation, Environmental Program 4/6/73

JAMES THORNTON, Professional Staff Member, Senate Committee on Agriculture and Forestry 4/10/73

HAROLD HINTON, Professor, George Washington University, Far Eastern and Chinese politics 5/4/73

WILLIAM McGREEVEY, Social Scientist, Office of the International Program for Population Analysis, Smithsonian Institution 5/8/73

FRANK A. SIEVERTS, Special Assistant for Prisoner of War Matters, Department of State 5/11/73

BYUNG-KI MIN- Member of the Korean National Assembly; former Professor of International Politics at Korea University and former Director of the ASPAC social-cultural center. 7/20/73

JOON-KYE PARK - Member of the Korean National Assembly; five term assemblyman, educated at Columbia, Chairman of the policy council of the ruling Democratic-Republican Party. 7/20/73

MOON-SHIK CHAE - Member of the Korean National Assembly; official spokesman for the opposition New Democratic Party, only member of the opposition in this group. 7/20/73

MYONG-HWAE KIM - Member of the Korean National Assembly; Ph. D from N. Y. U., former dean of the faculty of law and politics, Yonsei University. 7/20/73.

BUM-MO KOO - Member of the Korean National Assembly; former professor of Political Science and editor-in-chief of the Seoul University Press. 7/220/73.

DR. WALTER DEVRIES, Professor of Political Science at Duke, and MR. JACK BASS, South Carolina newspaperman. Special sherry hour on Southern States. 9/19/73

HONORABLE FRANK THOMPSON, JR., Congressman from New Jersey. Sherry Hour. 10/5/73

BROCK EVANS, Director of Washington Office of the Sierra Club. Sherry Hour. 10/12/73

PROFESSOR IGNACY SACHS, Ecole Practique des Hautes Etudes in Paris. Sherry Hour. 10/21/73

MARGARET MEAD, Anthropoligist and Author. Sherry Hour. 10/23/73

DR. ALI CAMBEL, Vice-President, General Research Corporation. Sherry Hour. 10/25/73.

PROFESSOR DRAGILEV, Head of the Economics Faculty, University of Moscow. 4:00 p.m. Library. 10/26/73

DR. STEPHEN BAILEY, Vice-President, American Council on Education. Sherry Hour. 10/30/73.

EVGENY S. SHERSHNEV, former economic attache in Washington and senior research fellow of the USA Institute in Moscow. Sherry Hour. 11/9/73.

PROFESSOR C.N. YANG, Nobel Laureate in Physics - State University of New York. 4:00 p.m. Library. 11/6/73

S. DOUGLASS CATER, Director Aspen Institute's Program on Communications and Society. Sherry Hour. 11/6/73.

CIPRIANA SCELBA, Executive-Director, Commission on Education and Cultural Exchange between the USA and Italy. Sherry Hour. 12/7/73.

I.F. STONE, former publisher/writer. Discussion with Julius Stone on Future of Law. 4:00 p.m. to 6:00 p.m. WWICS Library. 12/7/73

ROBERT HUNTER, member of Senator Edward Kennedy's staff currently in Middle East. Sherry Hour. 12/18/73.

PROFESSOR MICHAEL LINDSAY of American University, experiences in China with Mao Tse-tung in 1945 (one year). Sherry Hour. 12/28/73.

SPECIAL EVENTS
1973

1/16/73 "Citizen Apathy and Initiative." Third in a series of monthly seminars, lectures, and informal discussions on "Voluntarism and the Public Interest in American Society," jointly sponsored with the Smithsonian. JOHN DIXON, Director, Center for a Voluntary Society, moderator.

1/23/73 EISAKU SATO, former Prime Minister of Japan. Informal afternoon discussion and reception; "Discuss and Answer Questions about Current U. S. -Japan Relations."

1/29/73 "Perspectives of Developing Countries Generally, and India in Particular on Long-term Issues of Sustainable Growth." Fourth in a series of dinner discussions on growth issues for invited guests from government and private organizations and selected WWICS fellows. LAKSHMI KANT JHA, Ambassador of India, speaker. Participants: WALLACE BOWMAN, Chief, Environmental Policy Division, Library of Congress; DETLEV BRONK, Rockefeller University, New York; RICHARD P. CONLON, Vice President, Business International, Inc.; CHARLES DENNISON, Consultant to National Academy of Sciences and others; JOSEPH FISHER, President, Resources for the Future, Washington, D. C.; DAVID FREEMEN, Director, Energy Policy Project; WALTER HAMILTON, Vice President of Public Affairs Research, The Conference Board, Inc.; ERIC GONSALVES, Minister, Embassy of India; HAROLD LINDER, Consultant to World Bank and others; DANIEL P. MOYNIHAN, U. S. Ambassador to India; GERALD POLLACK, Corporate Planning Department, Exxon; MAURICE WILLIAMS, Deputy Administrator, AID; ARNOLD PACKER, Committee for Economic Development; BEN READ, Director, WWICS; ALBERT MEISEL, Deputy Director, WWICS; MICHAEL LACEY, Assistant to the Director, WWICS; ROLAND BROWN, HARRY BLANEY, CHESTER COOPER, LINCOLN GORDON, SHAMSUL HUQ, FRANCIS MURPHY, CLAIRE NADER, ARVID PARDO, JOHN MILTON, EUGENE RABINOWITCH, RAIMI OJIKUTU, ATHELSTAN SPILHAUS, ROBERT WALKER, fellows, WWICS.

2/22/73 "International Systems and American Foreign Policy." Joint Seminar of the Council on Foreign Relations and the Woodrow Wilson Center. WILLIAM W. WHITSON, RAND Corporation, LINCOLN GORDON, WWICS, HONKOO LEE, WWICS, ALBERT MEISEL (presiding), EARL C. RAVENAL, WWICS (chairing), ROBERT AMORY, JR., National Gallery, ROBERT R. BOWIE, Brookings Institution, LESTER R. BROWN, Brookings Institution, SEYOM BROWN, Brookings Institution; CHESTER L. COOPER, WWICS, ALTON FRYE, WWICS, CHARLES GATI, Columbia University, LESLIE H. GELB, Brookings Institution, JAMES C. GRAHAM, CIA, MICHAEL A. GUHIN, White House, National Security Council, RICHARD HOLBROOKE, Foreign Policy,

MORTAN A. KAPLAN, University of Chicago, WILLIAM A, K. LAKE, Carnegie Endowment for International Peace, HANS MORGENTHAU, CIty University of New York, ROBERT E. OSGOOD, Johns Hopkins School of Advanced International Studies, LEON K. PFEIFFER, Council on Foreign Relations, STEPHEN S. ROSENFELD, Washington Post, HELMUT SONNENFELDT, White House, National Security Council, RICHARD C. STEADMAN, J. H. Whitney & Company, ROBERT W. TUCKER, Johns Hopkins School of Advanced International Studies, CHARLES W. YOST, former U.S. Ambassador to the United Nations, PHILIP TRESIZE, Brookings Institution, EUGENE TRANI, WWICS, HARRY BLANEY, WWICS, WILLIAM B. SPONG, WWICS, CAROLINE FULLER, Senator Huddleston's Office, ALVIN WEINBERG, WWICS, EUGENE RABINOWITCH, WWICS.

2/26/73 "Report on a communications experiment by Professor William Foltz, Director, Graduate Studies, Department of Political Science, Yale University, and Dr. Leonard Doob, the Yale psychologist, conducted in Britain in September, 1972, involving Roman Catholic and Protestant citizens of Belfast." Fourth in a series of monthly seminars, lectures, and informal discussions on "Voluntarism and the Public Interest in American Societ," jointly sponsored with the Smithsonian.

3/5/73 "World Agricultural Out-look." Fifth in a series of dinner discussions on growth issues for invited guests from government and private organizations and selected WWICS fellows. LESTER BROWN, Senior Fellow, Overseas Development Council, speaker; AARON ALTSCHUL, Professor of Nutrition, Georgetown University: ALAN BERG, Deputy Director, Population & Nutrition Projects Department, World Bank; WALLACE BOWMAN, Chief, Environmental Policy Division, Library of Congress; AMBASSADOR HOWARD R. COTTAM, Washington Representative, U.N. Food & Agriculture Organization; DANA DALRYMPLE, International Economist, Agency for International Development; GAIL FINSTERBUSCH, Conservation Foundation; DON LESH, Vice President, Potomac Associates, Inc.; HAROLD LINDER, Consultant to World Bank and others; ARNOLD PACKER, Committee for Economic Development; BEN READ, President, German Marshall Fund, Washington, D.C.; MAURICE WILLIAMS, Deputy Administrator, Agency for International Development; THOMAS W. WILSON, JR., Vice President, International Institute for Environmental Affairs, Washington; ALBERT MEISEL, WWICS, Acting Director; HARRY BLANEY, CHESTER L. COOPER, LINCOLN GORDON, HONGKOO LEE, FRANCIS MURPHY, JOHN MILTON, RAIMI OJIKUTU, EUGENE RABINOWITCH, fellows, WWICS.

March 1-3
1973 — Two-day Conference "The Human Environment in Africa." Invited and participating countries: TOGO, UPPER VOLTA, NIGERIA, GHANA, ETHIOPIA, CAMEROUN, BOTSWANA, MADAGASCAR, KENYA, CHAD, CENTRAL AFRICAN REPUBLIC, TANSANIA, SENEGAL, GABON, NIGER, ZAIRE, IVORY COAST, LIBERIA, ZAMBIA, MALAWI, ECONOMIC COMMISSION FOR AFRICA. Participating-observers: WHITMAN BASSOW, LEON BILLINGS, WALLACE BOWMAN, WILLIAM EILERS, JAMES FOWLER, FITZHUGH GREEN, WILLIAM HAYNES, RICHARD HELLMAN, CHRISTIAN HERTER, DALE JENKINS, JAMES LEE, JOHN McDONALD, ROBERT STEIN. RAIMI OLA OJIKUTU (Nigeria, WWICS fellow) moderator.

4/10/73 — Senator Humphrey's bill on "Balance Growth." Sixth in a series of dinner discussions on growth issues for invited guests from government and private organizations and selected WWICS fellows. JAMES THORNTON, Senate Agriculture Committee, led the discussion. Attendees: WALLACE BOWMAN, Chief, Environmental Policy Division, Library of Congress; CHARLES Dennison, Consultant, National Academy of Sciences; ERIC GONSALVES, Minister, Embassy of India; JAMES GRANT, President, Overseas Development Council; WALTER HAMILTON, Vice President of Public Affairs Research, The Conference Board, Inc.; MICHAEL MICHAELIS, Arthur D. Little & Co.; MANCUR OLSON, Professor of Economics, University Maryland; LESLIE STONE, Foreign Correspondent, British Broadcasting Corp.; THOMAS W. WILSON, JR., Vice President, International Institute for Environmental Affairs, Washington, D. C.; ALBERT MEISEL, WWICS, Acting Director; CHESTER COOPER, ROLAND BROWN, LINCOLN GORDON, FRANCIS MURPHY, CLAIRE NADER, RAIMI OJIKUTU, JOHN OWEN, EUGENE RABINOWITCH, HONGKOO LEE, JOHN MILTON, fellows, WWICS.

4/30/73 — "Growth" - Congressional Hearing Dinner. CONGRESSMAN JOHN D. DINGELL, Chairman, Fisheries and Wildlife Conservation and the Environment Subcommittee; GERALD BARNEY, Commission on Third Century America; WALLACE BOWMAN, Chief, Environmental Policy Division, Library of Congress; ERNEST J. CORRADO, Chief Counsel, Merchant Marine & Fisheries Committee; NED EVERETT, Counsel, Subcommittee on Fisheries and Wildlife Conservation and the Environment; ROBERT A. FROSH, Assistant Executive Director, U.N. Environment Program, United Nations; ALFRED HELLER, Director, California Tomorrow; PETER HUNT, Consultant on Environment Affairs; NED KENWORTHY, New York Times; DENNIS MEADOWS, Author of Limits to Growth, Professor at Dartmouth; RUSSELL PETERSON, Commission on Third Century America; FRANK POTTER, Subcommittee on Fisheries and Wildlife Conservation and the Environment; BEN READ, President, German Marshall Fund; CONGRESSMAN PAUL N. McCLOSKEY (California); STEVEN SALYER, Co-Director, Citizen's Committee on Fisheries and the American Future; ANTHONY J. WIENER, Vice President, Hudson Institute; CLAY WELBOURNE, Library of Congress;

RICHARD HYDE, Researcher, ALBERT MEISEL, Acting Director, WWICS; HARRY BLANEY, CHESTER L. COOPER, LINCOLN GORDON, fellows, WWICS.

5/2/73 "New Federalism." Conference of the Woodrow Wilson Center in cooperation with the National Journal. "Roles of State and Local Governments" (morning session); Introductory Remarks: NEAL PIERCE, fellow, WWICS; Presentations: NELSON A. ROCKEFELLER, Governor of New York, RICHARD G. LUGAR, Mayor of Indianapolis, GLADYS NOON SPELLMAN, President, National Association of Counties; Comments: CLARENCE MITCHELL, Director, Washington Bureau, National Association for the Advancement of Colored People; THOMAS L. ASHLEY, Representative from Ohio; DANIEL J. ELAZAR, Director, Center for the Study of Federalism, Temple University. "Executive and Legislative Views" (afternoon session); Moderator: ALTON FRYE, fellow, WWICS; Presentations: RICHARD P. NATHAN, Senior Fellow, Brookings Institution, former Deputy Undersecretary Health, Education and Welfare; ALEXANDER M. BICKEL, Professor, Yale Law School; Comments: JIMMY CARTER, Governor of Georgia; MOON LANDRIEU, Mayor of New Orleans; WALTER R. HUNDLEY, Director, Seattle Model City Program. Approximately 225 leaders in local, state, and federal affairs, as well as authorities in intergovernmental relations in foundations, research institutions attended.

5/10/73 "Growth" Dinner with Government representatives. Discussion led by RUSSELL TRAIN, Director, Council on Environmental Quality. Participants: ALVIN ALM, Staff Director, Council on Environmental Quality; DR. GERALD BARNEY, Third Century in America, New York; WALLACE BOWMAN, Chief, Envilronmental Policy Division, Library of Congress; DAVID BECKLER, Office of Science and Technology; RICHARD CARPENTER, Executive Director, Environmental Studies Program, Nat ional Academy of Sciences; PHILANDER CLAXTON, Special Assistant to the Secretary for Population Matters, Department of State; CHARLES J. DI BONA, Special Consultant to the President; CONGRESSMAN JOHN D. DINGELL (Michigan); HENRY ESCHWEGE, Director, Resources and Economics Division, Comptroller General's Office; STANLEY GREENFIELD, Assistant Administrator, Office of Research and Monitoring, Environmental Protection Agency; RICHARD GERSON, Reseach & Development Incentives, National Science Foundation; KEN GRAY, Administrative Assistant to Senator Hubert H. Humphrey; SENATOR PHILIP A. HART; DEAN HINTON, Deputy Executive Director, Council of International Economic Policy, The White House; SENATOR HUBERT H. HUMPHREY: GEORGE JASZI, Director, Bureau of Economic Analysis, Department of Commerce; ROGER LeGASSIE, Deputy Director, Office of Planning and Analysis, Atomic Energy Commission; ELLIS MOTUR, Office of Technology Assessment; BERNARD NAGELVOORT, Administrative Assistant to Congressman Guy Vander Jagt of Michigan; NEAL PETERSON, Attorney at Law; FRANK POTTER, Subcommittee of Fisheries and Wildlife Conservation and the Environment; JOHN SAWHILL, Office of

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Management & Budget; CONGRESSMAN ALAN STEELMAN OF TEXAS; ARNOLD STEINBERG, Special Assistant to Senator James L. Buckley of New York; JAMES VOGELY, Director, Office of Economic Analysis, Department of Interior; MAURICE WILLIAMS, Deputy Administrator, Agency for International Development; ALBERT MEISEL, WWICS, Acting Director; WILLIAM M. DUNN, WWICS, Administrative Officer; HARRY BLANEY, CHESTER L. COOPER, ALTON FRYE, LINCOLN GORDON, ROBERT H. WALKER, WWICS fellows.

5/30/73 "The Phenomenon of John Foster Dulles." Presentation by TOWNSEND HOOPES, fellow, WWICS. Attendees: DOAK BARNETT, Brookings Institution; MORTON HALPERIN, Brookings Institution; ALBERT MEISEL, Acting Director, WWICS; RAJESHWAR DAYAL, LINCOLN GORDON, MARIAN IRISH, HONGKOO LEE, FRANCIS X. MURPHY, RAIMI OJIKUTU, JOHN OWEN, ARVID PARDO, EARL RAVENAL, W. TAYLOR REVELEY, W. RICHARD SMYSER, ATHELSTAN SPILHAUS, EUGENE TRANI, fellows, WWICS.

5/31/73 Dinner Discussion. Woodrow Wilson Center and Council on Foreign Relations with the General Affairs Committee of the Western European Union. Participants: GEORGE KAHN-ACKERMANN, Germany; FRANZ AMREHN, Germany; JULIAN CRITCHLEY, United Kingdom; PAUL DE CLERCQ, Belgium; W. PERCY GRIEVE, United Kingdom; GABRIEL PERONNET, France; M.W.J.M. PEIJNENBURG, Holland; MICHAEL STEWART, United Kingdom; ERICH MENDE, Germany; HEKTOR DE BRUYNE, Belgium; SIR JOHN RODGERS, United Kingdom; MANFRED VOHRER, Germany; HENRI BURGELIN, Secretary of the Committee; RICHARD HARDING, Department of State; RICHARD DOTSON, Department of State; JEREMY STONE, Director, Federation of American Scientists; C. BURTON MARSHALL, Johns Hopkins University (SAIS); TIMOTHY STANLEY, Executive Vice President, International Economic Association; JOHN SHERMAN COOPER, attorney, Covington and Burling; SAMUEL DePALMA, State Department; HOWARD SIMONS, Managing Editor, Washington Post; ALBERT MEISEL, Acting Director, WWICS: ALTON FRYE, TOWNSEND HOOPES, CHESTER L. COOPER, LINCOLN GORDON, W. RICHARD SMYSER, TAYLOR REVELEY, fellows, WWICS.

6/18/73 "Living with the Atom." Growth discussion on Alvin Weinberg's paper, "How Can Man Live with Fission?" - Dr. Weinberg is Director of the Oak Ridge National Laboratory and was a former Guest Scholars of the Woodrow Wilson Center. Attendees: LUCILLE ADAMSON, Environmental Defense Fund, Washington, D.C.; JOHN O. BLOMEKE, Oak Ridge National Laboratory; FRANK SCHROEDER, Office of Technical Advisor, U.S. Atomic Energy Commission; FRANK VON HIPPEL, Physicist, Fellow, National Academy of Sciences; HENRY KENDALL, Department of Nuclear Engineering, M.I.T.; CLARENCE E. LARSON, Commissioner U.S. Atomic Energy Commission; FRANK K. PITTMAN, Director

Waste Management and Transportation Division, U. S. Atomic Energy Commission; ANNTHONY ROISMAN, attorney, Derlin, Roisman, and Kessler; SIDNEY SEIGEL, Deputy Director, Environmental and Medical Sciences, Oak Ridge National Laboratory; ROBIN WILLIAMS, Physicist, National Energy Policy Project; PHILIP SPORN, former head of the American Electric Power Company; WALTER H. ZINN, former director of the Argonne National Laboratory; GEORGE L. WEIL, consultant in the field of nuclear energy; ALBERT MEISEL, Acting Director, WWICS; CHESTER L. COOPER, LINCOLN GORDON, CLAIRE NADER, fellows, WWICS: JUDY CORSON, ANNE GAULT, staff, WWICS Growth.

7/26-27/73 "Growth as a Value inAmerican Culture." Growth Symposia Speakers were: Professor CHARLES POWERS, Associate Professor of Social Ethics, Divinity School, Yale University; Professor JOHN WILMERDING, Leon E. Williams Professor of Art, Art Department, Dartmouth College; Professor SIDNEY AHLSTROM, Religious Studies, Yale University; and Professor DANIEL AARON, English Department, Harvard University, Chairman of the Committee on Higher Degrees in the History of American Civilization. Attendees: DR. KENNETH LYNN, Professor of American History Johns Hopkins University; Ms. CARRIE JOHNSON, Editorial Page Department, The Washington Post (evening only), Mrs. ANNE PALUMBO, Research Assistant to Mr. Walker. WWICS Staff: ALBERT MEISEL, Acting Director; MICHAEL LACEY, Assistant to the Director. WWICS Fellows: CHESTER L. COOPER, LINCOLN GORDON, JOHN MILTON, FRANCIS X. MURPHY, RAJA RAO, EUGENE TRANI, ROBERT H. WALKER. ANNE GAULT, staff, WWICS Growth.

7/29/73 "The International Implications of the Soviet-U. S. Meeting, June 29." Seminar (ad hoc) Participants were: Mr. Nicholas Andrews, Office of Soviet Union Affairs, Department of State; Mr. Pierre Audigier, Scienticif Counselor, Embassy of France; Mr. Daniel Bardonnet, Fellow, WWICS; Dr. James H. Billington, Director, WWICS; Mr. V. Chernyshev, Washinton Correspondent for TASS; Dr. William Davidson, President, Institute of Psychiatry and Foreign Affairs; Dr. Wilton Dillon, Director of Seminars, SI; Mr. Cyrus Eaton, Jr., President, Tower International Corp.; Mr. Alexander P. Evstafiev, Press Counsellor, Embassy of the Union of Soviet Socialist Republics; Dr. Bernard Feld, Professor of Physics, MIT; Ms. Louise Fitz Simons, Human Factors Research Associates, Inc.; Dr. Alton Frye, Fellow, WWICS; Dr. Berkley C. Hathorne, Office of International Activities, National Institute of Mental Health; Mr. James H. Hutson, Coordinator of Bicentennial Programs, Library of Congress; Dr. Martin Irish, Fellow, WWICS, Dr. Hongkoo Lee, Fellow, WWICS, Ms. Georgene B. Lovecky, Committee on International Exchange of Persons, National Academy of Sciences; Mr. Albert Meisel, Deputy Director, WWICS: Dr. K. P. Misra, Fellow, WWICS; Dr. Raimi Ojikutu, Fellow, WWICS; Dr. William Pollin, Special Assistant to the

Director, Division of Narcotics Addiction and Drug Abuse, National Institute of Mental Health; Ms. Priscilla Randolph, Associate, Institute for Psychiatry and Foreign Affairs; Mr. Herman Rebhan, Director, International Affairs, United Auto Workers; Ms. Clara Reece, Vice President, Tower International Corporation; Mr. B. Sdrelnikov, Washington Correspondent for Pravda; Dr. T. Timofeiev, Director, Institute of International Labor Studies, and member, Bureau of Soviet Preparatory Commission of World Congress of Peace Forces; Dr. Eugene Trani, Fellow, WWICS.

7/30/73 Sustainable Growth --Government Forum Dinner: Chairman: Chester L. Cooper, Fellow, WWICS. Participants: Mr. Alvin Alm, Environmental Protection Agency; Mr. Jack Alterman, Asst. Commissioner, Economic Trends and Labor Conditions, Department of Labor; Mr. Tim Barnacle, Legislative Assistant to Senator Humphrey; Mr. John Barnum, Undersecretary, Department of Transportation; Mr. Davis Z. Beckler; Mr. Harry Blaney, Member, Planning and Coordination Staff, Dept. of State; Mr. Richard Carpenter, Executive Director, Environmental Studies Program, National Academy of Sciences; Mr. Charles DiBona, Consultant to the President; Congressman John D. Dingell of Michigan; Mr. Henry Eschwege, Director, Resources and Economics Division; Comptroller General's Office; Mr. Gerald Grady, Select Committee on Committees, House of Representatives; Dr. Stanley Greenfield, Asst. Administrator, Office of Research and Development, Environmental Protection Agency; Mr. Dean Hinton, Deputy Executive Director, Council of International Economic Policy, The White House; Dr. Peter House, Environmental Protection Agency; Mr. William B. Irwin, Asst. Secretary of Agriculture for Rural Development; Dr. George Jaszi, Director, Bureau of Economic Analysis, Department of Commerce; Dr. Sidney Jones, Asst. Secretary for Economic Affairs, Department of Commerce; Mr. Roger LeGassie, Deputy Director, Office of Planning and Analysis, Atomic Energy Commission; Mr. Dudley Mecum, Asst. Director, Office of Management and Budget; Mr. Ellis Motur, Office of Technology Assessment; Mr. Bernard Nagelvoort, Administrative Assistant Congressman Guy Vander Jagt of Michigan; Dr. Mancur Olson, Department of Economics, University of Maryland; Mr. Frank Potter, Subcommittee of Fisheries and Wildlife Conservation and the Environment; Mr. Barry Riordan, Staff Member, Council on Environmental Quality; Mr. Calus Ruser, Deputy Director for Policy Analysis and Resources, Department of State; Mr. John Sawhill, Office of Management and Budget; Mr. David Scheffer, Intern, Council on Environmental Quality; Mr. Elmer Staata, Comptroller General of the United States; Dr. H. Guyford Stever, Director, National Science Foundation; Mr. James Thornton, Subcommittee on Agriculture & Forestry; Mr. Maurice Williams, Deputy Administrator, AID. WWICS Staff: Mr. William M. Dunn, Administrative Officer. WWICS fellows: Mr. C. Alton Frye, political scientist, arms control specialist, Legislative context of American foreign policy; Ms. Judith Corson, Research Asst.

Ms. Anne Gault, Research Assistant; Mrs. Sue Gerson, Admin. Asst.

9/20/73 Sustainable Growth - Dinner Seminar: Chairman: Chester L. Cooper. Speaker: Prof. Ignacy Sachs, Ecole Practique des Hautes Etudes, Paris. Participants: Mr. Joel Bernstein, Asst. Admin. Bureau for Technical Assistance, AID; Mr. Harry Blaney, Member, Planning and Coordination Staff, Dept. of State; Mr. Larry Fabian, Brookings Inst.; Dr. John H. Gibbons, Director, Office of Energy Consv. Dept. of Interior; Dr. Peter House, Environmental Protection Agency; Mr. Hans H. Landsberg, Resources for the Future; Dr. John Milton, Ecologist; Dr. Manew Olson, Department of Economics, Univ. of Maryland; Mr. John C. Sawhill, Associate Director OMB; Mr. Harvey Shermans, Environmental Section, Library of Congress; Mr. Robert Stein, Attorney, Special in Environmental Affairs. WWICS Staff: Dr. Billington, Mr. Dunn. WWICS Fellows: Messrs. Cooper, Gordon, Mishan, Stone, Lakoff, Ms. Nader. Growth Project Staff: Anne Gault, Sue Gerson.

10/2/73 Sustainable Growth Conference at Wingspread, Racine
10/3/73 Wisconsin. Part of Johnson Foundation Activities. Attended by Dr. Billington, Robert Walker, Ezra Mishan, Clare Nader, Mr. Lakoff, Dr. Cooper, Mr. Gordon, Sue Gerson and Anne Gault.

10/4/73 TEN CHINESE LIBRARIANS from Peoples Republic of China 11:00-11:30 a.m. WWICS Library.

10/25/73 GEORGE COSTAKIS, "A Unique Collection of Russian Abstract Art" at Freer Gallery, 4:00 p.m.

10/16/73 FACULTY DINNER for Presidents of Universities and Deans of Graduate Schools of Metropolitan Area (approximately 15 persons). Evening affair.

10/26/73 PROFESSOR DRAGILEV, Head of the Economics Faculty at the University of Moscow-Informal presentation on future of Soviet-American economic relations. 4:00 p.m. Library.

11/1/73 Reception/Coctail party (Annual) in Great Hall for approximately 200 people. 6:00 to 8:00 p.m.

11/3/73 NEW FEDERALISM SEMINAR under direction of George Bustin.

11/17/73 COUNCIL ON FOREIGN RELATIONS - 25 persons in WWICS Library -- 9:30 a.m. to 5:00 p.m.

12/5/73 COUNCIL ON FOREIGN RELATIONS - Working dinner 5:00 to 10:00 p.m. in WWICS Library and Rotunda. Approximately 27 persons.

12/11/73 RECEPTION for Faculty Members from six Metropolitan areas universities. Approx. 65/70 people in WWICS Library 6:00 to 8:00 p.m.

ATTACHMENT 4

A Partial List of Publications by Center Fellows

1973

R. P. ANAND

"Interests of the Developing Countries and the Developing Law of the Sea," Annals of International Studies (Geneva). Special Issue of Law of the Sea, July 1973.

"Tyranny of the Sea Doctrine," International Studies, July-September 1973.

"Limits of National Jurisdiction in the Sea-bed," India Quarterly, Special Issue on Law of the Sea, April-June 1973.

"Legal Continental Shelf and What It Includes," Journal of The Institute of Defence Studies and Analysis (Delhi) Vol. 5, No. 3, January 1973.

ROBERT J. ART

"Bureaucratic Politics and American Foreign Policy - A Critique," Policy Sciences, December 1973.

MALCOLM BALDWIN

"The Oil Industry and the Environment," Exploration and Economics of the Petroleum Industry, Mathew Bender & Co., 1973.

"Debunking Madison Avenue," Environmental Action, April 14, 1973.

"Oil and Puget Sound," (co-author with Pamela L. Baldwin) The Living Wilderness, Autumn, 1973.

"State and Local Response to Energy Facility Siting Issues," discussion paper for Ford Foundation Energy Policy Project Conference on State and Local Decision-Making on Energy Policy, September, 1973.

A Scientific and Policy Review of the Prototype Oil Shale Leasing Program Final Environmental Impact Statement, co-edited with Katherine Fletcher, December 1973.

M. CHERIF BASSIOUNI

A Treatise of International Criminal Law: Crime and Punishment, Vol. I, February 1973; Jurisdiction and Cooperation, Vol. II, August 1973. Springfield, Illinois, Charles C. Thomas, Publisher.

HARRY C. BLANEY

"Better Ways to Clean Up Our International Rivers", NATO Review, Jan.-Feb. 1973 issue.

"NATO's Third Dimension", VFW Magazine, Feb. 1973.

"The Energy Crisis and International Cooperation", Foreign Service Journal, August 1973.

"The Energy Crisis: Challenge to the International System", World Affairs, Winter 1973-74.

ZEB B. BRADFORD

The United States Army in Transition (with Fredric J. Brown), Sage Press, November 1973.

ROY S. BRYCE-LAPORTE

"Relocatización urbana y adaptación familiar en Puerto Rico," published in Revista de Ciencias Sociales, March 1973, translated from Peasants in the Cities, Boston, Houghton-Mifflin.

"Family, Housefold and Intergenerational Relations in a 'Jamaican' Village in Limon, Costa Rica," Caribbean Studies, 1973.

"Cultural Persistence and Social Relations of Jamaicans in Rural Costa Rica" (Unpublished Thesis). Two chapters and an interview translated into Spanish in El Negro de Costa Rica by Carlos Melendez, Quince Duncan, and Maria E. Bozzoli de Wille (eds.), San Jose, Costa Rica, Editorial San Jose, 1973.

LUCIUS C. CAFLISCH

Les sujets du droit international, Vol. 3 of Series I (1922-1945) of: Répertoire des documents des Cours de La Haye. Geneva 1973, 792 p.

Lucius C. Caflisch (con't)

"Hydrospace in International Relations", Annals of International Studies, Vol. 4 1973, 370 p. (including an article entitled "The Spilling of Oil into the Sea by Merchant Ships")

C. L. COOPER

"Sustainable Growth," pp. 207-212, Chapter 6, and "Attributes of Successful Planning," pp. 221-224, Chapter 6, Alternative Futures and Environmental Quality, Environmental Protection Agency, May 1973.

ALTON FRYE

"Limiting the Balance of Terror," The Ripon Forum, July 1973.

"Arms Talks: An Avenue for Mutual Trust," Los Angeles Times: Opinion, August 26, 1973.

"Arsenals and Detente," Washington Star-News, July 22, 1973.

ISMET GIRITLI

The Middle East and Communism (in Turkish), Negiogin Publishing House, Istanbul 1973, TL 15.

LINCOLN GORDON

"International Implications of Growth Policy," in Environmental Protection Agency, Alternative Futures and Environmental Policy, pp. 135-155.

"Brazil in the Sixties," Review Essay on Riordan Roett, editor, Brazil in the Sixties, published by United States Information Agency in Problemas Internacionales (in Spanish).

"Economic Development and Human Rights," in Proceedings of 1973 Annual Conference of American Society of International Law.

Introduction to Philip Raine, Brazil: Awakening Giant, Public Affairs Press 1973.

JULES GUERON

"La coopération scientifique européenne: in Supplément Annuel 1973 a l'Encyclopédie EST Mondadori.

Jules Gueron (con't)

"L'Energie Nucléaire" (Que sais-je), PUF 1973.

"Qu'en est-il d'Euratom", L'Europe en formation, Mai 1973.

MORITAKA HAYASHI

"Comparative National Legislation on Offshore Pollution," Syracuse Journal of International Law and Commerce, Vol. I, No. 2, 1973.

FERDINAND A. HERMENS

"Wiemar in der Bundesrepublik," Verfassung und Verfassungswirklichkeit, Jahrbuch 1973, Teil 1, pp. 203-209.

GODFREY HODGSON

"The Establishment," Foreign Policy, #10, Spring 1973.

"The Retreat from Education," Atlantic Monthly, March 1973.

"The Politics of Medicine," Atlantic Monthly, October 1973.

TOWNSEND HOOPES

The Devil and John Foster Dulles, Atlantic Monthly Press, Little, Brown & Co. (Boston) 1973.

DONALD L. HOROWITZ

"Color Differentiation in the American Systems of Slavery," Journal of Interdisciplinary History, Winter 1973.

"Direct, Displaced, and Cumulative Ethnic Aggression," Comparative Politics, October 1973.

FRIEDHELM KRUEGER-SPRENGEL

"International Security and Navigation," Wehrkunde, Munich, April 1973 (in German).

STUART H. LOORY

Defeated: Inside America's Military Machine, New York, Random House, October 1973.

JOHN P. MILTON

Ecological Principles for Economic Development, J. P. Milton and others, John Wiley & Sons, 1973.

"The Last Great Wilderness," American Wilderness, National Geographic Society, Washington, D. C., 1973.

Report on Tropical Ecology, J. P. Milton and others. Institute of Ecology, F. Galley, ed., late 1973.

"Eastern Forest Recreation and Land Use Conflicts," Appendix O of The Report of the President's Advisory Panel on Timber and the Environment, U.S. Government Printing Office, Washington, D. C., April 1973.

JAMES A. MOSS

Book Review of The Fourth World: Victims of Group Oppression, Ben Whitaker, ed., Schocken Press, New York, 1973, (review for the International Migration Review).

YVES-HENRI NOUAILHAT

Les Etats-Unis: l'avènement d'une puissance mondiale: 1898-1933, Editions Richelieu, Collection l'Univers Contemporain, Paris 1973.

ARVID PARDO

Draft articles on the preservation of the marine environment (including, inter alia, the prevention of pollution), Sub-Committee III, Committee on the Peaceful Uses of the Sea-Bed and the Ocean Floor beyond the Limits of National Jurisdiction, United Nations General Assembly, A/AC. 138/SC. III/L. 33, March 16, 1973.

Draft articles on scientific research Sub-Committee II, Committee on the Peaceful Uses of the Sea-Bed and the Ocean Floor beyond the Limits of National Jurisdiction, United Nations General Assembly, A/AC. 138/SC. III/L. 34, March 23, 1973.

Arvid Pardo (con't)

Preliminary draft articles on the delimitation of coastal State jurisdiction in ocean space and on the rights and obligations of coastal States in the area under their jurisdiction, Sub-Committee I, Committee of the Peaceful Uses of the Sea-Bed and the Ocean Floor beyond the Limits of National Jurisdiction, United Nations General Assembly, A/AC. 138/SC. II/L.28, July 16, 1973.

Statement by Dr. A. Pardo in Sub-Committee II of Seabed Committee, Geneva, August 8, 1973, SC.II/WG/Paper No. 4.

Address to the American Oceanic Organization, published in Congressional Record, November 9, 1973.

NEAL PEIRCE

The Great Plains States of America: People, Politics and Power in the Nine Great Plains States, W. W. Norton & Company, New York, 1973.

AMOS PERLMUTTER

Egypt: The Praetorian State, Transactions, 1973.

P. SREENIVASA RAO

"Development and the Sea," XVII Oceanus 6-11, 1973.

RAJA RAO

The Climate of Indian Writing, Literary Criterion, Mysore, India, 1973.

EARL C. RAVENAL

"The Problem of International Order," Foreign Service Journal, April 1973.

"The Case for Strategic Disengagement," Foreign Affairs, April 1973.

Earl C. Ravenal (con't)

"Toward Zero Military Assistance," Foreign Military Sales and Assistance Act, Hearings before the Committee on Foreign Relations, U.S. Senate, May 3, 1973.

GEORGE E. REEDY

The Presidency in Flux, Columbia University Press, June 1973.

H. J. ROSENBAUM

"Economic Growth and Authoritarianism in Brazil," Europa-Archiv, November 1973.

"Social Development: A Case Study of the Inter-American Foundation," Views on Foreign Assistance, Foreign Relations Committee, U.S. Senate, 1973.

ATHELSTAN SPILHAUS

"Engineering Afloat: Toward a Sea City," Technology Review, M.I.T., Cambridge, Massachusetts, Vol. 75, No. 3, January 1973.

"A Century to Invent," Century 2 in Perspective, Angelo Cohn, ed., Minneapolis Sunday Tribune (sponsored by Northwestern National Bank), January 1973.

"Bountiful Grants of the Sea," Vital Speeches of the Day, Vol. XXXIX, No. 12, (reprinted from M.I.T. speech), April 1, 1973, pp. 365-69.

"Bountiful Grants of the Sea," Congressional Record, Vol. 119, No. 71, (reprinted from M.I.T. speech), May 10, 1973, (E-3124).

"The Utmost Is Never Enough," American Newspaper Publishers Association Convention Bulletin, No. 6, June 1, 1973.

"Ecolibrium -- or the new industrial revolution," Reclamation Industries International, September/October 1973 issue, Croydon, England, pp. 27-33.

"The Oceans and National Economic Development," Proceedings of a Senate Commerce Committee Document (keynote address given at NOAA Conference, Seattle, Washington, July 17, 1973.

"Bountiful Grants from the Sea," The Saturday Evening Post, September/October, 1973.

"The Oceans, Our Nation's Business," published by the Center for Marine Resources and Sea Grant Program, Texas A & M University, November 1973.

Harmony of Man's Industry and Living Space, Claremont College, Claremont, California, 1973.

"Could 'Cities in Sea' Solve Environment Problems," Boise, Idaho, Idaho Statesman, April 8, 1973.

KURT R. SPILLMANN

"Wilsonian Ideas and European Politics, A Comparative Analysis of Peace Aspirations," Contagious Conflict, the Impact of American Dissent on European Life, ed. by A. N. J. den Hollander, Leiden (Holland), E. J. Brill, 1973, pp. 126-71.

JULIUS STONE

"Knowledge, Survaval and the Duties of Science" American University Law Review, December 1973.

EUGENE P. TRANI

"Hubert Work," Edward T. James, ed., Dictionary of American Biography: Supplement Three, 1941-1945, Charles Scribner's Sons, New York, 1973, pp. 945-46.

VERNON VAN DYKE

"One Man One Vote, and Majority Rule as Human Rights," Human Rights Journal (Revue des Droits de l'Homme), Vol VI, Nos. 3-4, 1973.

"Human Rights without Discrimination," American Political Science Review, December 1973.

"Equality and Discrimination in Education. A Comparative and International Analysis," International Studies Quarterly, Vol. 17, No. 4, December 1973.

ROBERT WALKER

Review of G. W. Pierson's The Moving Americans, published in Commonweal, 1973.

DAVID WISE

The Politics of Lying: Government Deception, Secrecy, and Power, Random House, New York, 1973.

"Colby of C. I. A. -- C. I. A. of Colby," The New York Times Magazine, July 1, 1973.

ATTACHMENT 5

CONTRIBUTIONS, 1973

Private Contributions for period January 1, 1973-December 31, 1973:		$95,100
Contributions to date since Center opened:		
Foundations	$361,689	
Corporations	126,850	
Individuals	13,191	
Government and Other	203,000	
		$704,730
Outside Institutional support received by fellows during course of appointments in form of continued salary, sabbatical pay and grants (as of January 1, 1974)		548,508

ATTACHMENT 6

BOARD OF TRUSTEES

William J. Baroody, Chairman

Daniel P. Moynihan, Vice Chairman

William M. Batten, New York, New York

Ronald S. Berman, Chairman, National Endowment for the Humanities

Robert H. Bork, Washington, D. C.

Henry A. Kissinger, Secretary of State

Paul W. McCracken, Ann Arbor, Michigan

Harry C. McPherson, Jr., Washington, D. C.

L. Quincy Mumford, Librarian of Congress

James B. Rhoads, Archivist of the United States

S. Dillon Ripley, Secretary of the Smithsonian Institution

John P. Roche, Weston, Massachusetts

Rawleigh Warner, Jr., New York, New York

Caspar W. Weinberger, Secretary of Health, Education and Welfare

ATTACHMENT 7

Public Law 90-637
90th Congress, S. 3174
October 24, 1968

An Act

To establish a National Memorial to Woodrow Wilson.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Woodrow Wilson Memorial Act of 1968." Woodrow Wilson Memorial Act of 1968.

82 STAT. 1356
82 STAT. 1357

DECLARATION OF POLICY

SEC. 2. The Congress hereby finds and declares—

(1) that a living institution expressing the ideals and concerns of Woodrow Wilson would be an appropriate memorial to his accomplishments as the twenty-eighth President of the United States, a distinguished scholar, an outstanding university president, and a brilliant advocate of international understanding;

(2) that the Woodrow Wilson Memorial Commission, created by joint resolution of Congress, recommended that an International Center for Scholars be constructed in the District of Columbia in the area north of the proposed Market Square as part of the Nation's memorial to Woodrow Wilson;

(3) that such a center, symbolizing and strengthening the fruitful relation between the world of learning and the world of public affairs, would be a suitable memorial to the spirit of Woodrow Wilson; and

(4) that the establishment of such a center would be consonant with the purposes of the Smithsonian Institution, created by Congress in 1846 "for the increase and diffusion of knowledge among men."

THE CENTER AND THE BOARD OF TRUSTEES

SEC. 3. (a) There is hereby established in the Smithsonian Institution a Woodrow Wilson International Center for Scholars and a Board of Trustees of the Center (hereinafter referred to as the "Center" and the "Board"), whose duties it shall be to maintain and administer the Center and site thereof and to execute such other functions as are vested in the Board by this Act. Woodrow Wilson International Center for Scholars; Board of Trustees of the Center. Establishment.

(b) The Board of Trustees shall be composed of fifteen members as follows: Membership.

(1) the Secretary of State;

(2) the Secretary of Health, Education, and Welfare;

(3) the Chairman of the National Endowment for the Humanities;

(4) the Secretary of the Smithsonian Institution;

(5) the Librarian of Congress;

(6) the Archivist of the United States;

(7) one appointed by the President from time to time from within the Federal Government; and

(8) eight appointed by the President from private life.

(c) Each member of the Board of Trustees specified in paragraphs (1) through (7) of subsection (b) may designate another official to serve on the Board of Trustees in his stead.

(d) Each member of the Board of Trustees appointed under paragraph (8) of subsection (b) shall serve for a term of six years from the expiration of his predecessor's term; except that (1) any trustee appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed shall be appointed for the remainder of such term, and (2) the terms of office of the trustees first taking office shall begin on the date of the enactment of this Act, Term.

and shall expire as designated at the time of appointment, two at the end of two years, three at the end of four years, and three at the end of six years. No trustee of the Board chosen from private life shall be eligible to serve in excess of two consecutive terms, except that a trustee whose term has expired may serve until his successor has qualified.

82 STAT. 1357
82 STAT. 1358

(e) The President shall designate a Chairman and a Vice Chairman from among the members of the Board chosen from private life.

POWERS AND DUTIES OF THE BOARD

SEC. 4. (a) In administering the Center, the Board shall have all necessary and proper powers, which shall include but not be limited to the power to—

(1) appoint scholars, from the United States and abroad, and, where appropriate, provide stipends, grants, and fellowships to such scholars, and to hire or accept the voluntary services of consultants, advisory boards, and panels to aid the Board in carrying out its responsibilities;

(2) solicit, accept, and dispose of gifts, bequests, and devices of money, securities, and other property of whatsoever character for the benefit of the Center; any such money, securities, or other property shall, upon receipt, be deposited with the Smithsonian Institution, and unless otherwise restricted by the terms of the gift, expenditures shall be in the discretion of the Board for the purposes of the Center;

(3) obtain grants from, and make contracts with, State, Federal, local, and private agencies, organizations, institutions, and individuals;

(4) acquire such site as a location for the Center as may subsequently be authorized by the Congress;

(5) acquire, hold, maintain, use, operate, and dispose of any physical facilities, including equipment, necessary for the operation of the Center;

(6) appoint and fix the compensation and duties of the director and such other officers of the Center as may be necessary for the efficient administration of the Center; the director and two other officers of the Center may be appointed and compensated without regard to the provisions of title 5 of the United States Code governing appointments in the competitive service and chapter 51 and subchapter III of chapter 53 of title 5 of the United States Code; and

5 USC 5101 et seq., 5331 et seq.

(7) prepare plans and specifications for the Center, including the design and development of all buildings, facilities, open spaces, and other structures on the site in consultation with the President's Temporary Commission on Pennsylvania Avenue, or its successor, and with other appropriate Federal and local agencies, such plans to include an exterior classic frieze memorial to Woodrow Wilson.

(b) The Board shall, in connection with acquisition of any site authorized by Congress, as provided for in paragraph (4) of subsection (a) of this section, provide, to businesses and residents displaced from any such site, relocation assistance, including payments and other benefits, equivalent to that authorized to displace businesses and residents under the Housing Act of 1949, as amended. The Board shall develop a relocation program for existing businesses and residents within the site and submit such program to the government of the District of Columbia for a determination as to its adequacy and feasibility. In providing such relocation assistance and developing

63 Stat. 413. 42 USC 1441 note.

such relocation program the Board shall utilize to the maximum extent the services and facilities of the appropriate Federal and local agencies.

ADMINISTRATION

SEC. 5. The Board is authorized to adopt an official seal which shall be judicially noticed and to make such bylaws, rules, and regulations as it deems necessary for the administration of its functions under this Act, including, among other matters, bylaws, rules, and regulations relating to the administration of its trust funds and the organization and procedure of the Board. A majority of the members of the Board shall constitute a quorum for the transaction of business.

APPROPRIATION

SEC. 6. There are hereby authorized to be appropriated to the Board such funds as may be necessary to carry out the purposes of this Act: *Provided*, That no more than $200,000 shall be authorized for appropriation through fiscal year 1970 and no part of that appropriation shall be available for construction purposes.

RECORDS AND AUDIT

SEC. 7. The accounts of the Board shall be audited in accordance with the principles and procedures applicable to, and as part of, the audit of the other Federal and trust funds of the Smithsonian Institution.

Approved October 24, 1968.

LEGISLATIVE HISTORY:

HOUSE REPORT No. 1942 accompanying H. R. 19988 (Comm. on House Administration).
SENATE REPORT No. 1599 (Comm. on Rules & Administration).
CONGRESSIONAL RECORD, Vol. 114 (1968):
Oct. 3: Considered and passed Senate.
Oct. 7: Considered and passed House, amended, in lieu of H. R. 19988.
Oct. 11: Senate agreed to House amendment.

29-393 O - 74 - 101

Object Classification

Personnel compensation:	1974 estimate	1975 estimate
11.1 Permanent positions	222	302
11.3 Positions other than permanent	14	15
11.5 Other personnel compensation	-	-
Total personnel compensation	236	317
12.0 Personnel benefits	19	26
21.0 Travel and transportation of persons	22	40
23.0 Rent, communications, and utilities	30	38
24.0 Printing and reproduction	15	36
25.1 Other services	458	515
26.0 Supplies and materials	12	17
31.0 Equipment	13	21
Total costs, funded	805	1,010
Changes in selected resources	-	-
99.0 Total obligations	805	1,010

Personnel Summary

	1974 estimate	1975 estimate
Total number of permanent positions	15	20
Full-time equivalent of other employees	1	1
Average number of all employees	16	21
Average G.S. Grade	8.81	8.52
Average G.S. Salary	14,798	13,834

WOODROW WILSON INTERNATIONAL CENTER FOR SCHOLARS

Detail of Permanent Positions

	1974 estimate	1975 estimate
GS-14 $23,088 to $30,018	1	1
GS-12 $16,682 to $21,686	2	3
GS-11 $13,996 to $18,190	-	1
GS-9 $11,614 to $15,097	1	2
GS-8 $10,528 to $13,687	2	1
GS-7 $9,520 to $12,373	3	3
GS-6 $8,572 to $11,146	2	2
GS-5 $7,694 to $10,007	1	4
GS-4 $6,882 to $8,943	1	1
Ungraded	2	2
Total permanent positions	15	20
Unfilled positions	-	-
Total permanent positions, end of year	15	20

HIGHER LEVEL POSITIONS

GS-18 equivalent	Director	1	1
GS-16 equivalent	Deputy Director	1	1

HISTORICAL AND MEMORIAL COMMISSIONS
AMERICAN REVOLUTION BICENTENNIAL ADMINISTRATION

NARRATIVE JUSTIFICATION

On December 11, 1973, the Congress enacted P.L. 93-179 to establish the American Revolution Bicentennial Administration (ARBA) as a successor organization to the American Revolution Bicentennial Commission (ARBC). The purpose of the ARBA is to carry out the plans and programs for a grass-roots, nationwide commemoration developed by the ARBC. Thus, there will be no loss of momentum in carrying forward the Bicentennial commemoration.

Fiscal year 1975 will see the beginning of the Bicentennial commemoration era established in the new legislation as March 1975 to December 1976. Accordingly, the time for long lead-time planning is past. The ARBA must act immediately to carry forward its mandate under the new law. That mandate is to assure a Master Calendar of Bicentennial projects and programs encompassing the Heritage '76, Festival USA, and Horizons '76 themes, balanced thematically, geographically, and chronologically of local, State, national and international significance. Major areas of emphasis to reach this goal will be:

- Accelerated effort through the 10 ARBA Regional Offices to assist State and local communities in completing their final commemorative programs.

- Acceleration of the Bicentennial Communities Program to include more than 4,000 communities. This is a cooperative program with the U.S. Conference of Mayors, the National League of Cities and the National Association of Counties.

- Accentuated involvement with the private sector in sponsorship of Bicentennial programs and activities.

- Facilitation of exhibits, foreign attractions, cultural presentations, works of art, etc., for presentation in locations across the country in conjunction with scheduled Bicentennial activities.

- An increased communications program required by the mounting interest in the commemoration which will inform both special interest groups and the general public through film, publications, television, and radio regarding Bicentennial progress.

- Completion of a prototype exhibit program for showing both in the U.S. and abroad which will portray 200 years of

American history, with expectations for additional funding primarily by the private sector, including the exciting Franklin and Jefferson Exhibit to be unveiled in Paris, London, and Warsaw prior to U.S. showings in 1976.

- Development and implementation of nationwide competitions for essays, films, etc., progressing from the local to the national level with awards to the finalists in 1976.

- Expansion of the information in the Bicentennial Information Network (BINET) by adding many additional projects developing nationwide in BINET and by provision of data from BINET to State Bicentennial Commissions, travel and tourist organizations, and others requiring such information for their Bicentennial planning purposes.

- Coordination of Bicentennial programs of the Federal departments and agencies, including scheduling of activities and events.

- Design, production and distribution of the third in a series of Bicentennial commemorative medals, an awards medal, and a National Medal for 1976.

- Administration of non-appropriated matching grants program of assistance to the State and non-profit organizations, and of the new appropriated grants program of support to the States.

Program Review and Development

FY 1974 $800,000 Decrease $200,000 FY 1975 $600,000

Major Bicentennial exhibits, various Festivals of jazz and Indian dance, a World Theatre Festival of the world's greatest theatrical groups and artists, and production and distribution of various Bicentennial publications, are illustrative of the kinds of programs that are expected to be developed with private sector financing.

The nation's women have organized to develop their Bicentennial programs in conjunction with ARBA. Programs include a National Women's History Center, the International Festival of Women in the Arts, and the Community Resources Centers.

Youth involvement is being developed through organizations such as the Boy Scouts and Girl Scouts, student councils, 4-H groups, and other vocational and educational organizations, and by scholastic competitions for essays on subjects such as the ideas associated with the Revolution.

Work is progressing on a proposed Young People's Continental Congress in July 1976 in Philadelphia integrated with the goals of the National Junior Historian Movement.

An "Above-Ground Archeology" program or Heritage Memorabilia Search is a proposed national program to involve youth, developed in conjunction with the Society of American Archeologists to recover, restore and make available important historical artifacts gathering dust in trunks, attics and cellars across the country.

ARBA will continue to support and assist American Indian nations and other ethnic and minority groups in developing their special role in the Bicentennial. These projects include bibliographies of Black and Indian artists, Jazz Festivals, preparation of manuscripts of development of particular ethnic roles, customs, art and traditional dances, etc.

Also, meetings, seminars, convocations, and other national and international gatherings are being planned in cities across the nation in connection with the commemoration of the Bicentennial. ARBA is cooperating with groups both in the U.S. and abroad organizing such events, and with the host cities for the events.

Program Coordination

FY 1974 $1,600,000 Increase $550,000 FY 1975 $2,150,000

The ARBA will concentrate in FY 1975 on development of the Master Calendar of Bicentennial events--a mosaic of Bicentennial programs and activities of local, State, national and international significance which will be balanced thematically, geographically and chronologically.

Since accomplishment of the plans for FY 1975 will depend largely on the extent of participation of the private sector, a major effort will be made to involve the private sector in Bicentennial activities at both the national and local levels.

Significant programs in each of the three theme areas of Heritage '76, Festival USA, and Horizons '76 will be developed in cooperation with various national groups and associations and business firms.

Philatelic and numismatic programs will be further developed through such means as "Committees of Correspondence" of stamp groups; special Bicentennial philatelic competitions and awards; Bicentennial commemorative issues during the remaining Bicentennial years; the design, production and sale of the third in the series of special U.S. Mint-struck Bicentennial commemorative medals.

During FY 1975, ARBA will provide increased support to State Bicentennial Commissions and to local communities developing Bicentennial programs.

A major function will be to work with the many communities becoming active in the Bicentennial Communities Program, initiated last year for cities, counties, and Indian tribes. Over 600 communities have now been officially designated as Bicentennial Communities and at least 4,000 more are anticipated. The success of this program will create much increased demands for ARBA assistance and advice.

State and community coordination will be conducted to a large extent through the 10 Regional Offices now operational in the headquarters cities of each Federal region.

An important area of further program development includes ARBA coordination and facilitation of the programs being undertaken by major U.S. cities such as Philadelphia, Washington, D.C., Miami, Boston, San Francisco, and Denver.

Through FY 1975, the Regional Offices will serve State and local entities as primary liaison with the various Federal agencies and national organizations, and for the flow of technical assistance and other services required. Regional workshops with State Commissions will be held periodically during the year for coordinative purposes.

Scheduling and Facilitation

FY 1974 $350,000 Increase $50,000 FY 1975 $400,000

Closely interwoven with the ARBA responsibility to assist in the development of balanced and appropriate Bicentennial programs and events is the need to assist sponsors of such activities and host communities in securing exhibits, films, artifacts, performing arts groups, etc., and to schedule such activities across the nation in a logical and chronological manner.

Such facilitation will be accomplished through contacts with foreign governments and groups, other Federal and state agencies which are the repositories of required materials or services, and by providing information regarding other sources for such materials or services.

An important ARBA effort in FY 1975 will be to encourage and assist in the development of a nationwide circuit for the performing, creative and visual arts to bring domestic and international touring groups with Bicentennial programs to the maximum number of communities across the country.

A related ARBA activity will be to cooperate with the travel industry to determine transportation needs resulting from Bicentennial activities, particularly in view of the energy shortage.

Finally, ARBA will cooperate with the Department of Transportation and various States in the development of a uniform system of "Bicentennial signing" to identify and direct travelers to Bicentennial events and activities.

Bicentennial Information Network (BINET)

FY 1974 $400,000 Increase $400,000 FY 1975 $800,000

During FY 1975, the Bicentennial Information Network (BINET) will continue to expand with the addition of data concerning the many Bicentennial projects and events being developed across the nation.

BINET information is cataloged and disseminated to: (1) assist in development of a balanced nationwide program for the Bicentennial; (2) serve as a coordinative tool both for planners and participants; (3) inform the American public and foreign visitors of Bicentennial activities; and (4) provide a permanent archival record of activities in the Bicentennial era.

BINET will be a nationwide computer network tying together local, State, and Federal government agencies and the private sector with on-line information services. BINET terminals, operating through the telephone system, are available at all ARBA Regional Offices and such terminals or BINET printouts can be made available to Federal departments and agencies, State Bicentennial Commissions, the travel and tourist industries and others requiring Bicentennial information.

Communications

FY 1974 $1,000,000 Increase $300,000 FY 1975 $1,300,000

The ARBA communications efforts in FY 1975 will be directed primarily toward the following audiences: (1) the individual American; (2) private sector organizations, associations and foundations; (3) foreign governments and organizations; (4) youth; (5) women, minorities and ethnic organizations.

The message directed toward all of the above audiences will be intended to induce maximum participation and interest in the Bicentennial commemoration.

ARBA will also continue to provide informational materials to State and local Commissions, national organizations, historical associations, the media, etc.

The communications effort will include the following:

- Films, slide shows, and audio-visual materials.
- A monthly newspaper for the general public.
- A weekly news bulletin for Bicentennial planners.
- A quarterly magazine for general public distribution.
- News services to the American and foreign media.
- Bicentennial brochures covering specific Bicentennial subjects.

International Activities

FY 1974 $50,000 Increase $150,000 FY 1975 $200,000

During FY 1975, ARBA will expand its activities to encourage maximum foreign participation in the Bicentennial.

It will continue to serve as liaison between foreign governments and institutions and U.S. foreign affairs agencies, with the various State, community and private organizations looking for foreign government participation in their proposed Bicentennial activities.

In FY 1975, ARBA will once again work closely with the Smithsonian Institution's Folklife Festival to include foreign participation in the Festival in Washington, and subsequent scheduling in U.S. communities having close ethnic ties to the performing groups. It will also assist in the development of Operation Sail '76, a project for the visit of up to 30 sailing vessels from various foreign countries in the U.S. It will also assist Iowa State University in developing a World Food Conference in 1976.

A major emphasis in FY 1975 will be to assist groups, organizations and communities in securing foreign artifacts, performing groups, etc., relating to their heritage. The ARBA will assist the World Theatre Festival in bringing the finest foreign performing groups to the United States and with SITES, a Smithsonian Institution Division, in scheduling exhibits and works of art.

Exhibitions

FY 1974 $1,900,000 No Increase FY 1975 $1,900,000

Several major exhibit projects are currently in the stages of planning and design, with completion scheduled during FY 1975. Also, a film treatment and script is under consideration for

a multi-screen film to be produced by the American Film Institute. Once these projects have been completed, efforts will be made to solicit private sector sponsorship to help defray the costs of the film and fabrication costs and to circulate the exhibits throughout the country.

The exhibits include:

The Age of Franklin and Jefferson Exhibit

The exhibit deals with the era of Franklin and Jefferson, its relevance to society today, and the continuing significance of the ideals and concepts of America's Founding Fathers. The 5,000 square feet exhibit will contain actual artifacts, paintings, manuscripts, period reconstructions and other relevant pictorial materials.

One of the most outstanding designers in the United States--Mr. Charles Eames--is designing the exhibit for the ARBA. Mr. Eames, who has been described as a "20th Century Renaissance Man," is an architect, designer, film maker and furniture designer.

The exhibit is scheduled to be shown in Europe in 1974-1975 and in the United States in 1976:

PARIS..... December 14, 1974 - February 15, 1975
WARSAW..... May 1 - July 1, 1975
LONDON..... September 15 - November 15, 1975

(The showing cities in the U.S. have not yet been confirmed.)

"USA '76: The First Two Hundred Years" Exhibit

Designed by George Nelson and Company, this 5,000 square feet prototype exhibit is scheduled to be fabricated in mid-1974 and first shown in the Museum of Science and Industry in Chicago.

The exhibit consists of eight major sections, all of which combine to form an overview of the Bicentennial commemoration. The exhibit establishes, by means of sound and film projection, both the spirit and the mood of the Bicentennial.

Depicted in the exhibit, by means of color transparency slides, is America as the first explorers and settlers found it. Other sections emphasize the fact that change is as much a part of our heritage as democracy. An animated film dealing with the growth of America is followed by a portrait gallery of Americans which depicts, by means of photographs, Americans of all ages, occupations and races. The final two sections of the exhibit describe the basic themes of the Bicentennial and how citizens can become actively involved in the commemoration.

This prototype traveling exhibit can be shown either as a single total element occupying 5,000 square feet or as 8 separate elements.

Bicentennial Photography Exhibit

ARBA is planning to develop a Bicentennial Photography Exhibit along the lines of the Family of Man exhibit utilizing prize-winning photographs submitted for the Time, Inc.-sponsored Life Bicentennial Photography Contest, which was officially recognized by ARBA.

The proposed exhibit would include both color and black and white selected photographs from the contest. The exhibit will be available for circulating within each of the 10 U.S. regions and through USIA auspices, overseas during the latter part of FY 1975.

Bicentennial Traveling Exhibits

ARBA will continue to circulate its 14-panel Bicentennial traveling exhibit which deals with the basic ARBA objectives throughout FY 1975.

Office Support

FY 1974 $1,000,000 No Increase FY 1975 $1,000,000

P.L. 93-179 which established ARBA requires that the 25-member Advisory Council meet at least every two months, that the 11-member Board meet at least monthly, and provide for semi-annual Board reports and recommendations to the Congress, and an annual report from the Administration to the Congress. The support necessary to service the Council and the Board will come from the Offices of the Administrator, General Counsel, Congressional Liaison, and Finance and Administration.

Direct Grants to the States

FY 1974 $2,400,000 Decrease $1,025,000 FY 1975 $1,375,000

P.L. 93-179 continues a program of annual direct grants to the Bicentennial Commissions of the States, the District of Columbia, the Commonwealth of Puerto Rico and the Territories in the amount of $25,000 each. This will assume essential support to such Commissions for the continuing development of their Bicentennial activities.

Public Law 93-179 established the American Revolution Bicentennial Administration as successor to the American Revolution Bicentennial Commission. The activities formerly conducted by the Commission have been transferred to the Administration.

1. General administration.--These funds will assure a coordinated, balanced commemorative program encompassing the three themes of Heritage '76, Festival USA, and Horizons '76, developed and conducted under the aegis of the existing network of State and local Bicentennial commissions, national groups and organizations in the public and private sectors, as well as Federal agencies and foreign governments.

A primary function of the Administration is the preparation of the Master Calendar of events of local, State, and international significance to take place between March 1975 and December 31, 1976, four months of which come within 1975. A computerized Bicentennial Information Network maintaining the calendar, will make the public aware of activities and projects commemorating the 200th anniversary of the United States of America.

The Administration will operate 10 regional offices to assist regional State, and local committees and commissions. It will lend technical support including prototype exhibits, staging of special events, competitions, and the like.

2. Grants-in-aid.--The Administration will make both matching and nonmatching grants to State Bicentennial Commissions and other appropriate organizations to attain a balanced program.

SALARIES AND EXPENSES

OBJECT CLASSIFICATION (in thousands of dollars)

Identification code 31-03-1900-0-1-910		1973 actual	1974 estimate	1975 estimate
	Personnel compensation:			
11.1	Permanent positions	1,202	2,464	2,452
11.3	Positions other than permanent	4	29	65
11.5	Other personnel compensation	2	7	14
11.8	Special personal services payments	162	203	384
	Total personnel compensation	1,370	2,703	2,915
	Personnel benefits:			
12.1	Civilian	104	230	256
13.0	Benefits for former personnel	---	---	---
21.0	Travel and transportation of persons	158	667	738
22.0	Transportation of things	1	11	43
23.0	Rent, communications, and utilities	121	285	483
24.0	Printing and reproduction	139	616	947
25.0	Other services	1,750	2,607	2,829
26.0	Supplies and materials	23	38	41
31.0	Equipment	206	92	92
32.0	Lands and structures	---	---	---
33.0	Investments and loans	---	---	---
41.0	Grants, subsidies, and contributions	4,128	90	1,375
42.0	Insurance claims and indemnities	---	---	---
43.0	Interest and dividends	---	---	---
99.0	Total obligations	8,000	7,339	9,719

SALARIES AND EXPENSES

Program and Financing (in thousands of dollars)

Identification code 31-03-1900-0-1-910	1973 actual	1974 estimate	1975 estimate
Program by activities:			
1. General administration...	3,872	7,249	8,344
2. Grants-in-aid.....	4,128	90	1,375
10. Total obligations.....	8,000	7,339	9,719
Financing:			
11. Receipts and reimbursements from: Federal funds.....	-150	---	---
21. Unobligated balance available, start of year.....	-2,032	-90	---
24. Unobligated balance available, end of year.....	90	---	---
25. Unobligated balance, lapsing.....	316	---	---
Budget authority.....	6,224	7,249	9,719
Budget authority:			
40. Appropriation.....	6,224	7,100	9,719
44.20 Proposed supplemental for civilian pay raises.....	---	149	---
Distribution of budget authority by account:			
Commission.....	6,224	1,800	---
Administration.....	---	5,449	9,719
Relation of obligations to outlays:			
71 Obligations incurred, net..	7,850	7,339	9,719
72 Obligated balance, start of year.....	300	3,710	3,994
74 Obligated balance, end of year.....	-3,710	-3,994	-4,232
90 Outlays, excluding pay raise supplemental.....	4,440	6,912	9,475
91.20 Outlays from civilian pay raise supplemental.....	---	143	6
Distribution of outlays by Account:			
Commission.....	4,440	2,105	---
Administration.....	---	4,950	9,481

GIFTS AND DONATIONS

Program and Financing (in thousands of dollars)

Identification code 31-03-8091-0-7-910	1973 actual	1974 estimate	1975 estimate
Program by activities:			
10 General administration (total program costs, funded) (object class 25.0)	2	1	---
Financing:			
21 Unobligated balance available, start of year.....	-3	-1	---
24 Unobligated balance available, end of year.....	1	---	---
Budget authority.....	---	---	---
Relation of obligations to outlays:			
71 Obligations incurred, net..	2	1	---
72 Obligated balance, start of year.....	5	---	---
90 Outlays.....	7	1	

Revenue is generated for deposit into this account from the sale of medal and stamp packages and solo medals. These items are produced exclusively by the U.S. Mint and the stamps are printed, affixed and canceled by the Postal Service.

The Administration will utilize these funds on a matching basis for grants to States, cities, counties, etc., for worthwhile bicentennial projects.

COMMEMORATIVE ACTIVITIES FUND

OBJECT CLASSIFICATION (in thousands of dollars)

Identification code 31-03-5077-0-2-910		1973 actual	1974 estimate	1975 estimate
25.0	Other services.....	2,686	3,256	3,100
41.0	Grants, subsidies, and contributions.....	797	4,500	4,000
99.0	Total obligations.....	3,483	7,756	7,100

COMMEMORATIVE ACTIVITIES FUND

PROGRAM AND FINANCING (in thousands of dollars)

Identification code 31-03-5077-0-2-910	1973 actual	1974 estimate	1975 estimate
Program by activities:			
1.General administration, total cost funded	2,686	3,256	3,100
2.Project grants	797	4,500	4,000
10 Total obligation	3,483	7,756	7,100
Financing:			
21 Unobligated balance available, start of year	-1,205	-2,825	-2,093
24 Unobligated balance available, end of year	2,825	2,093	112
60 Budget authority (appropriation) (permanent, indefinite, special fund)	5,103	7,024	5,119
Distribution of budget authority by account:			
Commission	5,103	192	---
Administration	---	6,832	5,119
Relation of obligations to outlays:			
71 Obligations incurred, net	3,483	7,756	7,100
72 Obligated balance, beginning of year	---	1,192	4,382
74 Obligated balance, end of year	-1,192	-4,382	-1,903
90 Outlays	2,291	4,566	9,579
Distribution of outlays by account:			
Commission	2,291	647	---
Administration	---	3,919	9,579

SALARIES AND EXPENSES

CONSOLIDATED SCHEDULE OR PERMANENT POSITIONS PAID FROM FUNDS AVAILABLE TO THE OFFICE OF THE ADMINISTRATOR

Identification code 31-03-1900-2-1-910	1973 actual	1974 estimate	1975 estimate
Executive level III	---	1	1
Executive level IV	---	1	1
GS-18	---	1	1
GS-17	1	3	3
GS-16	---	1	1
GS-15	17	17	19
GS-14	7	11	13
GS-13	4	13	15
GS-12	2	9	9
GS-11	11	22	23
GS-9	5	13	12
GS-8	1	4	3
GS-7	7	26	27
GS-6	5	9	9
GS-5	4	9	9
GS-4	1	3	3
GS-2	1	1	1
Total full-time permanent positions	66	144	150
Unfilled positions, June 30	-9	-4	-4
Total permanent employment, end of year	57	140	146

PERSONNEL SUMMARY

Identification code 31-03-1900-2-1-910	1973 actual	1974 estimate	1975 estimate
Total number of permanent positions	66	144	150
Full-time equivalent of other positions	4	7	11
Average paid employment	56	132	146
Average GS grade	10.7	10.1	10.1
Average GS salary	$18,133	$16,018	$16,304

FEDERAL METAL AND NONMETALIC MINE SAFETY BOARD OF REVIEW

SALARIES AND EXPENSES

Appropriation/Total available, 1973..... $160,000

Appropriation/Total available, 1974..... 60,000

Summary of Increases and Decreases, 1975

	Base for 1975	Increase 1975	
Adjudication and Administration:			
Revised estimate of program needs.....	$60,000	$+3,000	$ +3,000
Budget estimate, 1975.....			63,000

Analysis by Activities

Activity	F.Y. 1973 Amount Available	F.Y. 1974 Amount Available	F.Y. 1975 Estimate	Increase (+) or Decrease (-) 1975 Compared with 1974
Adjudication and Administration.....	$50,489	$60,000	$63,000	$+3,000
Unobligated Balance Lapsing.....	109,511	---	---	---
Total.....	160,000	60,000	63,000	+3,000

JUSTIFICATION

Adjudication and Administration: Fiscal year 1974, $60,000; fiscal year 1975, $63,000; increase, $3,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
$+3,000	--	$63,000	2	Revised estimate of program needs.

An appropriation of $63,000 is requested for operation of the Federal Metal and Nonmetallic Mine Safety Board of Review for fiscal year 1975. This is $3,000 more than the Board's fiscal year 1974 budget.

The Federal Metal and Nonmetallic Mine Safety Board of Review is an independent, quasi-judicial agency, established by section 10 of the Federal Metal and Non-

metallic Mine Safety Act (30 U.S.C. 721-740). More particularly, section 10(a) of the act provides:

> "An agency is hereby created to be known as the Federal Metal and Nonmetallic Mine Safety Board of Review, which shall be composed of five members who shall be appointed by the President, by and with the advice and consent of the Senate."

The membership of the Board is required to be tripartite in nature, that is, two members must represent the viewpoint of the metal and nonmetallic mine operators; two members must represent the viewpoint of the metal and nonmetallic mine workers; and the chairman, who is required to be an engineer experienced in the metal and nonmetallic mining industry and without financial or employment connection with the groups concerned.

On July 15, 1971, the Senate confirmed the following individuals as members of the Board:

Howard L. Hartman (Chairman), of Tennessee, for the term of 5 years expiring September 15, 1975.

Peter J. Bensoni, of Minnesota, for the remainder of the term of 5 years expiring September 15, 1972. On October 14, 1972, the Senate confirmed Mr. Bensoni for the term of 5 years expiring September 15, 1977.

William W. Little, of Arizona, for the remainder of the term of 5 years expiring September 15, 1971. On October 21, 1971, the Senate confirmed Mr. Little for the term of 5 years expiring September 15, 1976.

Robert W. McVay, of Missouri, for the remainder of the term of 5 years expiring September 15, 1973. On December 5, 1973, the Senate confirmed Mr. McVay for the term of 5 years expiring September 15, 1978.

Charles E. Schwab, of Colorado, for the remainder of the term of 5 years expiring September 15, 1974.

The Federal Metal and Nonmetallic Mine Safety Act provides for promulgation, by the Secretary of the Interior, of mandatory health and safety standards applicable to metal and nonmetallic mines, and for the enforcement of such standards.

The Mining Enforcement and Safety Administration (MESA) performs the actual on-site inspections of mines.

The Board is a hearing agency, established to review contested orders issued by MESA which require a mine operator to withdraw personnel from a mine the Bureau believes to be in a condition in violation of mine safety standards. As such, the Board performs essentially a judicial function; the Board is not engaged in mine inspection, or in the promulgation of safety standards. A withdrawal order issued by MESA is reviewed by the Board whenever an operator of a mine affected by an order files an application for review with the Board. Appeals from final Board orders may be taken to the U.S. Courts of Appeals, and then to the U.S. Supreme Court.

To adjudicate the cases that come before it, the Board is required to conduct public hearings; to render final decisions and orders; and to certify records on appeals to the courts. Because of the "urgent need for prompt decisions," all such actions of the Board are specifically required to "be taken as rapidly as practicable, consistent with adequate consideration of the issues involved."

Apart from its adjudicative functions, the Board is required to perform the numerous organizational duties of any quasi-judicial agency in the executive branch. It is required to perform the ongoing activities of an independent agency: the maintenance of records, files and supporting data; the submission of administrative reports to other executive departments and agencies; reports to the Congress, including a detailed annual report of its operations; the prompt handling of inquiries and correspondence; and the participation in hearings before committees of the Congress.

During fiscal year 1972, the Board spent only $59,765 and during fiscal year 1973, the Board spent only $50,489. The Board was able to operate on a budget of these amounts because no cases were filed before the Board in either of these fiscal years. The Board, when estimating budget requirements in advance, must, of course, presume that at least some cases will be filed, as MESA is carrying on an active mine inspection program of the approximately 17,000 mines, quarries, sand and gravel pits, and milling operations covered by the Federal Metal and Nonmetallic Mine Safety Act.

The Board's fiscal year 1975 budget has been prepared on the assumption that only a small number of cases will be filed. Based on it's previous operating experience $53,000 will be required to maintain the Board in accordance with the provisions of the Federal Metal and Nonmetallic Mine Safety Act. In addition, $10,000 is requested for hearings costs should a caseload develop. Should sufficient caseload develop to the extent that additional resources are needed, supplemental appropriations would be required since the Board must be in a position to act promptly.

PERSONNEL SUMMARY

	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions...	2	2	2
Average paid employment.....	2	2	2
Ayerage GS grade.....	10.5	10.5	10.5
Average GS salary.....	$15,285	$16,518	$16,518

ITEMIZATION OF ESTIMATE

Appropriation Title: Salaries and Expenses — Federal Metal and Nonmetallic Mine Safety Board of Review

	1973 Actual	1974 Estimate	1975 Estimate	Increase (+) or Decrease (-)
Program and Financing:				
Total obligations.....	$50,489	$60,000	$63,000	$+3,000
Unobligated balance lapsing.	109,511	---	---	---
Budget authority (appropriation).....	160,000	60,000	63,000	+3,000
Object Classification:				
11. Personnel compensation...	30,212	35,000	37,000	+2,000
12. Personnel benefits.....	2,584	3,000	3,000	---
21. Travel and transportation of persons.....	1,520	4,000	7,000	+3,000
23. Rent, communications and utilities.....	13,380	13,000	9,000	-4,000
24. Printing and reproduction	222	1,000	1,000	---
25. Other services.....	2,237	3,000	5,000	+2,000
26. Supplies and materials...	334	1,000	1,000	---
Total obligations.....	50,489	60,000	63,000	+3,000

DEPARTMENT OF INTERIOR

JOINT FEDERAL-STATE LAND USE PLANNING COMMISSION FOR ALASKA

Salaries and Expenses

Appropriation, 1973	$708,000
Total Available, 1973	708,000
Appropriation, 1974	$694,400
Transferred to "Operating Expenses, Public Buildings Service", General Services Administration	- 81,700
Total Available, 1974	$612,700

Summary of Increases and Decreases, 1975

	Base for 1975	Increase 1975	
To provide for space and related services in GSA facilities per Public Buildings Act Amendments of 1972 (P.L. 92-313)	----	$81,700	
Net increase, 1975			81,700
Budget estimate, 1975			$694,400

Analysis by Activity

Activity	Fiscal Year 1973 Amount Available	Fiscal Year 1974 Total Appropriation	Fiscal Year 1974 Transfers 1/	Fiscal Year 1974 Amount Available
Salaries and expenses	$662,143	$694,400	$-81,700	$612,700
Unobligated balance lapsing	46,657	----	----	----
Total	$708,800	$694,400	$-81,700	$612,700

1/ Represents transfers to General Services Administration

Salaries and Expenses

	Fiscal Year 1973 Amount Available	Fiscal Year 1974 Amount Available	Fiscal Year 1975 Estimate	Increase(+) 1975 Compared to 1974	
Salaries and expenses	662,143	612,700	694,400	+81,700	2
Unobligated balance lapsing	46,657	- -	- -	- -	
Total	708,800	612,700	694,400	+81,700	

Salaries and expenses: FY 1974, $612,700; FY 1975, $694,400; and increase of $81,700. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $81,700	--	$81,700	--	To provide for space and related services in GSA facilities per P.L. 92-313
Total 81,700	--			

Cost Factors Involved in Increase

(1) Rent, communications and utilities, $81,700

Need for Increase

(1) GSA Space Cost +$81,700

This increase will provide for payment to the General Services Administration for Commission-occupied space in Anchorage Alaska in fiscal year 1975 in accordance with the Public Buildings Act Amendments of 1972 (P.L. 92-313). The amount requested is based on the rate supplied by GSA, which approximates commercial equivalent rates in Anchorage. The same space was financed by an appropriation transfer in 1974. The change in the method of financing space costs requires an increase in 1975 as compared to the adjusted appropriation in 1974. However, on a total appropriation basis, the $694,000 requested for fiscal year 1975 remains unchanged from the fiscal year 1974 amount.

Program of Continuing Work

The Joint Federal-State Land Use Planning Commission for Alaska was established in accordance with Section 17 of the Alaska Native Claims Settlement Act (Public Law 92-203) and by Act of the State of Alaska (AS 41.40.010). It began its activities in June 1972 with the establishment, by the Co-Chairman, of an office in Anchorage, Alaska. In July 1972 the Governor of Alaska and the Secretary of the Interior appointed the remaining eight Commissioners and assisted with the organizational meeting of the Commission.

In FY 1975 the Commission will continue a program of land use planning and submission of recommendations to the State and Federal governments on disposition and use of lands as required by Section 17 of the Alaska Native Claims Settlement Act of 1971. The program for FY 1975 will contain the following:

- Land use planning including identification and making recommendations with respect to areas best suited for retention in Federal ownership such as parks, game refuges, etc.; areas to be made available for disposal; and uses to be made of lands remaining in Federal and State ownership.

- Advising Native village and regional corporations on land use plans for selected lands.

- Reviewing existing public land withdrawals and making appropriate recommendations to the President of the United States.

- Holding public hearings on land-use planning programs and establishing a committee of land use advisors.

- Recommending appropriate program and budget levels for Federal and State land managing agencies to the President and the Governor. Also recommending changes in Federal or State laws, policies, and programs as deemed appropriate.

- Making recommendations to improve coordination and avoid conflict between the Federal and State governments and the Native people in land selection and land use decisions.

- Identifying necessary public easements across lands selected by village and regional corporations.

- Reporting to the President, the Congress, the Governor, and the State Legislature on the Commissions' activities.

For data gathering and research activities on Alaskan resources and present and projected land uses, the Commission is utitizing the services of a multi-discipline team consisting of resource specialists from various Department of Interior Bureaus, the Department of Transportation, the Forest Service, and the State of Alaska. Initially established as the North Alaska Planning Team under the jurisdiction of the Bureau of Land Management, this group provided an organization-in-being which could provide the Commission with resource data and professional expertise without the necessity for recruiting an entirely new staff of resource specialists. The team assignments are received from the Commission, but for administrative purposed the team members will continue to be employees of the various Federal Bureaus and the State of Alaska. Salaries of most of the Federal employees on the team, and other team expenses including administrative support costs, but excluding the salaries and related expenses of State employees assigned to the team, are paid by the Commission on a reimbursable basis. The State of Alaska pays the salaries and expenses of its employees who are team members, and these costs are considered as part of the 50 percent share of total commission expenses paid by the State.

In FY 1974, the Commission's immediate staff consist of 16 permanent employees including an Executive Director, Co-Counsels, an Economist, a Coordinator for Native Affairs, a Planner, and clerical support. This staff, together with the Federal Co-Chairman and the Governor's Representative, total the current 18 full-time employees of the Commission. Fiscal Year 1975 will see some change in emphasis in the Commission's program causing a decrease in the multi-discipline team and an increase of one Commission position (Regional Planner) for a total staff of 19 permanent employees.

A total budget of $694,400 is requested for the Federal share of Commission expenses in Fiscal Year 1975. The State of Alaska has indicated that an equivalent amount consisting of $500,000 in cash support, and $194,400 of in-kind support is included in the State's preliminary budget budget plans for FY 1975. The States's fifty percent share of Commission expenses is reflected in the estimate for Cooperative Funds on page 5.

Personnel Summary

	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions.....	9	14	15
Full-time equivalent of other positions...	2	1	1
Average paid employment.....	8	15	16
Average GS Grade.....	10.5	10.5	10.6
Average GS Salary.....	$17,402	$19,100	$19,500

LUPCA-3

ITEMIZATION OF ESTIMATE

Joint Federal-State Land Use Planning
Commission for Alaska
Salaries and Expenses (Federal share)

	Actual 1973	Estimate 1974	Estimate 1975	Increase (+) Decrease (-)
Program and Financing:				
Total obligations.....	$662,143	$612,700	$694,400	+$81,700
Transferred to other Accts..	---	81,700	---	---
Unobligated balance lapsing.	46,657	---	---	---
Appropriation:	$708,800	$694,400	$694,400	---
Obligations by Objects:				
11.0 Personnel compensation.	142,000	295,000	305,400	+ 10,400
12.1 Personnel Benefits: Civilian Employees.....	39,000	70,000	70,000	---
21.0 Travel and Transportation of persons.....	20,000	56,000	60,000	+ 4,000
22.0 Transportation of things.....	---	5,000	5,000	---
23.0 Rent, Communications, and utilities.....	46,000	19,000	60,000	+ 41,000
24.0 Printing and reproduction.....	---	10,000	15,000	+ 5,000
25.0 Other Services.....	385,143	139,700	160,000	+ 20,300
26.0 Supplies & Materials...	28,000	16,000	17,000	+ 1,000
31.0 Equipment.....	2,000	2,000	2,000	---
Total Obligations.....	$662,143	$612,700	$694,400	+ $81,700

Cooperative Trust Funds
(State Share)

Section 17 (a) (9) (A) of the Alaska Native Claims Settlement Act, Public Law 92-203, limits the Federal share of the expenses of the Joint Federal-State Land Use Planning Commission for Alaska to 50 percent. The State of Alaska provides for the remaining 50 percent of commission expenses through a combination of (1) assignment of State employees to the Commission's professional resource staff and (2) cash payments. The total estimated contribution for FY 75 is $694,400 of which $194,400 will be provided in-king through assignment of State employees; the remaining $500,000 will be a cash contribution as reflected in this account.

Personnel Summary

	1973 Actual	1974 Estimate	1975 Estimate
Total number of permanent positions.....	9	4	4
Full-time equivalent of other positions..	2	1	1
Average paid employment.....	8	5	5
Average GS Grade.....	10.5	10.5	10.6
Average GS Salary.....	$17,402	$19,100	$19,500

ITEMIZATION OF ESTIMATE
Joint Federal-State Land Use Planning
Commission for Alaska

Cooperative Funds

	Actual 1973	Estimate 1974	Estimate 1975	(+) Increase (-) Decrease
Program and Financing:				
Total obligations	$400,000	$500,000	$500,000	---
Appropriation.....	$400,000	$500,000	$500,000	---
Obligation by Objects:				
11.0 Personnel compensation.....	$122,000	$ 83,000	$ 83,000	---
12.0 Personnel Benefit: Civilian Employees.....	33,000	27,000	32,000	+ 5,000
21.0 Travel and Transportation of persons.....	20,000	46,000	56,000	+10,000
22.0 Transportation of things...	---	5,000	5,000	---
23.0 Rent, Communications, and utilities.....	28,000	60,000	60,000	---
24.0 Printing and reproduction..	---	10,000	15,000	+ 5,000
25.0 Other Service.....	178,000	251,000	230,000	-21,000
26.0 Supplies & Materials.....	17,000	15,000	16,000	+ 1,000
31.0 Equipment	2,000	3,000	3,000	---
Total obligations.....	$400,000	$500,00	$500,000	---

PENNSYLVANIA AVENUE DEVELOPMENT CORPORATION

Salaries and Expenses

For necessary expenses, as authorized by section 17 of Public Law 92-578, $831,000, to remain available until expended.

GENERAL STATEMENT

Having determined that the area adjacent to Pennsylvania Avenue between the Capitol and the White House because of its blighted condition imposes severe public, economic, and social liabilities upon the District of Columbia, Congress created the Pennsylvania Avenue Development Corporation to prepare and implement a development plan which would rejuvenate the area, consonant with its ceremonial and historic character.

The Corporation, established October 27, 1972 (Public Law 92-578) is governed by a fifteen voting member Board of Directors comprised of seven Federal and District officials and eight individuals appointed by the President from private life. In addition, seven other District and Federal officials, representing agencies with specialized interest and expertise in the redevelopment, sit with the Board as non-voting members. The area of jurisdiction of the Corporation, for which a unified development plan is to be prepared, lies along the north side of Pennsylvania Avenue, between 3rd Street on the east and East Executive Avenue on the West. The northern boundary line runs variously between F and E Streets.

The comprehensive development plan must include the following elements, among others:

1. The types of uses, public and private, to be permitted.

2. Criteria for the design and appearance of buildings, facilities and open spaces.

3. Estimates of the current values of all properties to be acquired, and land preparation costs.

4. Estimates of the reuse values of properties to be acquired and developed, and a program for staging development activities, including specification of the portion of the plan to be completed by 1976.

5. Estimates of public and private development costs, and a determination of the marketability of the development.

6. A thorough study of the economic impact of the development, including its effect on the local tax base; and,

7. Procedures, both interim and long-term, for carrying out and ensuring continuing conformance to the development plan.

After the development plan has been prepared by the Corporation and approved by the Board of Directors, it is to be transmitted to the Secretary of the

Interior and the Commissioner of the District of Columbia, who have 90 days for review and comment. In addition, the Commissioner is charged with holding public hearings during the review period. A further 30 days is provided by the Act for adjustments to the plan, as necessitated by any comments or proposals advanced by the foregoing reviewing bodies. Within one hundred and twenty days from transmittal to the Secretary of the Interior and the Commissioner of the District of Columbia, the plan shall go forward to Congress, whereafter 60 legislative days it may be implemented by the Corporation, if neither House has passed a resolution in opposition to the plan in the interim.

The Corporation has been granted a broad range of powers to implement the development plan, including the power of eminent domain and the authority to write regulations, covenants, and agreements necessary to assure that projects within the area conform to the overall plan. The Act also authorizes the Corporation to borrow up to fifty million dollars from the United States Treasury (in such amounts as may be authorized in appropriation Acts), to fund land acquisitions and development activities. In view of the fact that 50 million dollars will probably not suffice for such a large scale development, the Corporation is also required to obtain not less than three financing studies from private analysts, weighing the relative merits of public versus private financing. The financing studies will accompany the development plan to Congress for review and consideration. The Corporation began its activities at the beginning of this fiscal year, upon the availability of funds. Effectively, $850,000 has been made available to the Corporation for FY 74 operations: $350,000 through the Second Supplemental Appropriation Act, 1973, to remain available; $350,000 pursuant to the FY 74 appropriation; and, $150,000 through an FY 74 supplemental appropriation. The initial efforts of the Corporation from July through early September were directed toward obtaining staff, office space, equipment, and contracting for economic and engineering studies needed to provide basic planning data.

In view of the small size of the Corporation's staff, currently at a level of 13 personnel, it was necessary to enter into the following contracts:

1. Phase I economic analysis - $50,000; consisting of a study evaluating development potentials, financial implications, land use alternatives and marketability projections.

2. Phase II economic analysis - $52,500; consisting of revision and amplification of the above study, and adding analyses of development staging, relocation assistance, and detailed projections of the economic implications of several major proposed projects.

3. Phase I subsurface traffic improvements study - $100,000; consisting of a feasibility study for the construction of tunnels extending E Street underground from approximately 13th Street, west past the White House grounds, and the construction of an underpass to carry Constitution Avenue under Pennsylvania Avenue near the National Gallery.

4. Phase II subsurface traffic improvements study - $35,000; consisting of an analysis of improvements to E Street, refinement of the Constitution Avenue underpass proposal, and detailed cost analyses of the foregoing projects, incorporating changes developed as planning progressed.

5. Surface traffic improvements study - $9,400; consisting of an analysis of traffic circulation throughout the development area with proposals to improve same, taking into consideration the

impact of proposed development projects.

6. Community groups briefings and report - $3,000; consisting of the organization, solicitation of participants, and hostings of a series of meetings with representatives of over 45 community business, professional and special interest groups to present the evolving development plan and to obtain comments, and a final report summarizing the results of such meetings.

7. Building restoration studies - $4,800; consisting of the technical analyses of the feasibility and general costs of preservation and/or restoration of several buildings of historic or architectural value in the development area.

8. Housing design - $20,000; consisting of the design of a multi-use commercial and housing development capable of accommodating 1500 dwelling units of medium density construction.

The above contracts have resulted in the expenditure or obligation of a total of $274,700. Additional contracts, at as of yet undetermined costs, are anticipated for paving and landscaping studies, lighting studies, and studies related to the preparation of an environmental impact statement.

Funds in the amount of $831,000 are required herewith to finance the salaries, administrative, and operating expenses of the Pennsylvania Avenue Development Corporation during fiscal year 1975. The Corporation's program in FY 75 reflects a shift in proposed expenditures from that of the current year, in that a lesser reliance on outside contracts is anticipated during the next year, and the concomitant use of somewhat larger in-house staff. The size of the staff is expected to increase from 15 to 20 permanent positions, requiring an estimated $462,000 for salaries and related benefits. Other services, largely contracts, are expected to cost $269,000. The costs of operational expenses such as rent, communication, utilities, supplies, and materials are expected to be similar to FY 74 levels.

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SALARIES AND EXPENSES

Program and Financing (in thousands of dollars)

Identification code 32-08-0100-0-1-909	1973 actual	1974 estimate	1975 estimate
Program by activities:			
General administration (program costs, funded)[1]	----	750	871
Change in selected resources (undelivered orders)	----	100	-40
10 Total obligations	----	850	831
Financing:			
21 Unobligated balance available, start of year		-350	----
24 Unobligated balance available, end of year	350	----	----
40 Budget authority (appropriation)	350	500	831
Relation of obligations to outlays:			
71 Obligations incurred, net	----	850	831
72 Obligated balance, start of year	----	----	125
74 Obligated balance, end of year	----	-125	-50
90 Outlays	----	725	906

[1] Includes capital outlay as follows: 1973, $0; 1974, $25 thousand; 1975, $5 thousand.

OBJECT CLASSIFICATION (in thousands of dollars)

Identification code 32-08-0100-0-1-909	1973 actual	1974 estimate	1975 estimate
Personnel compensation:			
11.1 Permanent positions	-------	240	399
11.3 Positions other than permanent	-------	25	27
Total personnel compensation	-------	265	426
Personnel benefits:			
12.1 Civilian	-------	22	36
21.0 Travel and transportation of persons	-------	16	24
23.0 Rent, communications, and utilities	-------	45	46
24.0 Printing and reproduction	-------	30	15
25.0 Other services	-------	437	269
26.0 Supplies and materials	-------	10	10
31.0 Equipment	-------	25	5
99.0 Total obligations	-------	850	831

Personnel Summary

Identification code	1973 actual	1974 estimate	1975 estimate
Total number of permanent positions	------	15	20
Full-time equivalent of other positions	------	1	1
Average paid employment	------	15	21
Average GS grade	------	11.4	12.2
Average GS salary	------	$17,874	$20,234

DETAIL OF PERMANENT POSITIONS

	1973 actual	1974 estimate	1975 estimate
GS-17	------	1	1
GS-15	------	3	3
GS-14	------	1	1
GS-13	------	1	6
GS-12	------	1	3
GS-11	------	3	2
GS-9	------	2	2
GS-7	------	2	1
GS-6	------	------	1
GS-5	------	1	------
Total permanent positions	------	15	20
Unfilled positions, June 30	------	------	------
Total permanent employment, end of year	------	15	20

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